PENCIL POINTS

PROGRESSIVE ARCHITECTURE

February 1945

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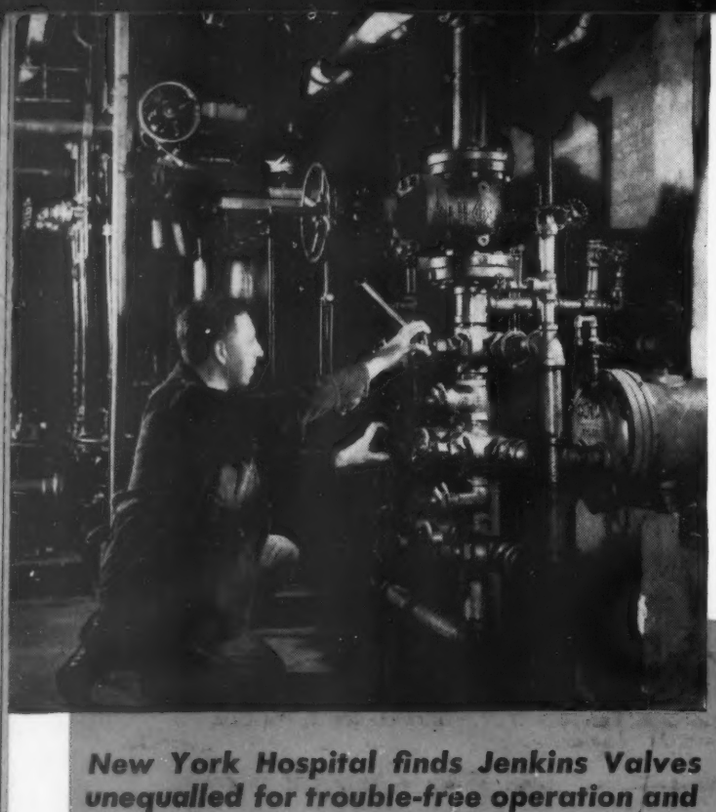

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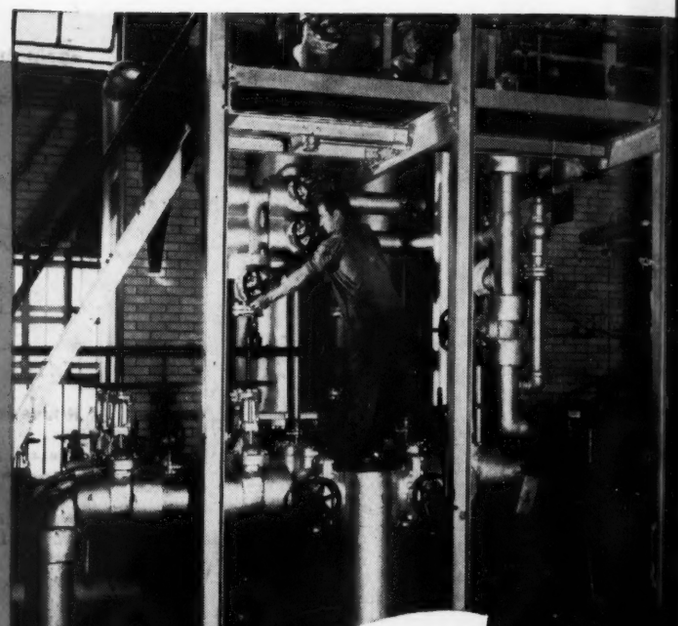

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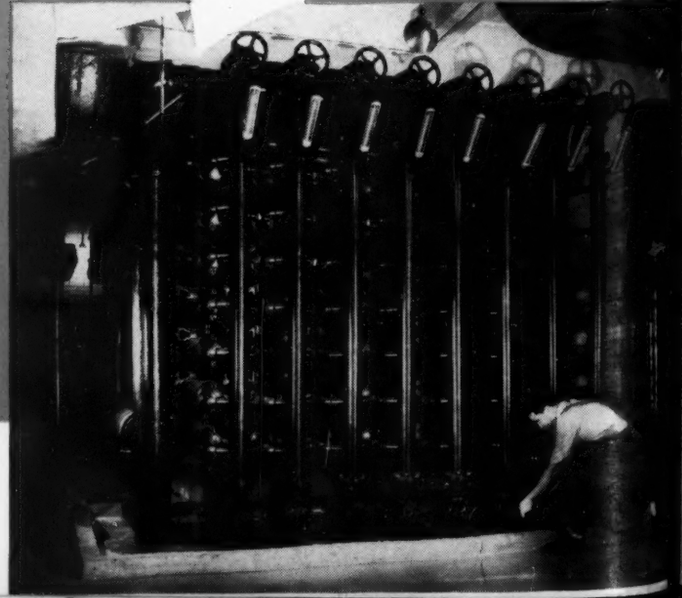

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Pencil Points

PROGRESSIVE ARCHITECTURE

February, 1945

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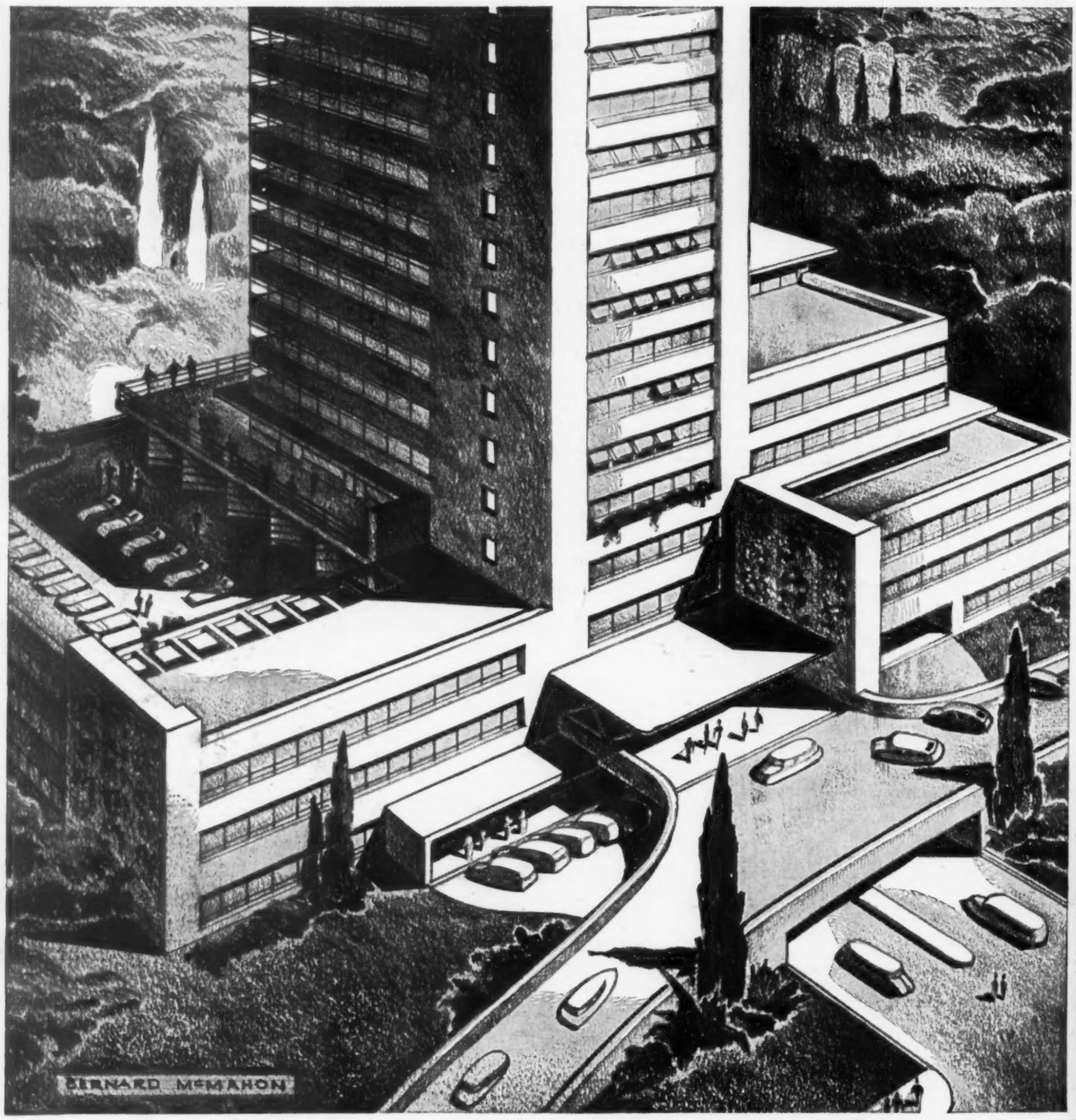

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Views

Opinions from readers

Remarks from the editors

Changes of address

The Unforgotten Man

Dear Editor:
Receipt of PENCIL POINTS at this isolated base is eagerly awaited each month with considerable source of inspiration and preparation for V-Day when I hope to return to architectural practice. You are to be highly commended on your editorial "Jobs and Men"—October issue—as well as your policy of working in behalf of the entire architectural profession; quoting as follows: "Perhaps the time has come to start questioning the proper authorities on the advisability of eventually discharging architectural men on the basis of overwhelming need for them. The actual date for selective demobilization is of course not yet at hand; as it approaches, PENCIL POINTS will intensify its efforts." I am sure that many architectural men, now in the service, greatly appreciate your efforts to return them to their former chosen work. Soon I will have my third anniversary with the "Seabees," having served 14 months in the Guadalcanal campaign and now in the Aleutian sector on my second tour of duty.

CARL SCHMUELLING
CM1c, USNR, A.I.A.,
Somewhere in the Aleutians

Found Inside a Christmas Card from the Philippines

Dear Editor:
Queried by American Designers Institute (an open letter) as to my present activities as designer, I have the pleasure of submitting to you the following brain storm which was interrupted by six air raids while being written:

TREATISE ON THE DESIGN OF FOXHOLES FOR HIGH AND LOW INCOME GROUPS

The design of foxholes has presented a major problem for the architects of all times but it is reliably reported that the Romans developed a classical prototype of high perfection. The modern architect should indulge in a careful study before drawing up plans and specifications. For the sake of individuality and full enjoyment the author recommends limiting the foxhole to one person only. The circulation problem is of great importance. Care should be taken to get in as fast as possible. The man in the street may be satisfied with walls hewn out of the earth and an open roof. However, the FHA might not approve of such practice. The minimum standard for the low income group should provide walls lined with matting which can be purchased from the natives at low cost. A roof slab should cover half of the foxhole. Plastering of the ceiling can be omitted. Tongue and groove floor boards and quarter-round moulds or skirt boards would contribute to the homeliness, especially if you are expecting visitors. The housing authorities, it is safe to assume, will approve of this standard design.

The standard can be further improved by providing tile flooring, venetian blinds, chintz curtains, a smooth-finished plaster ceiling, and wainscoting of striped walnut or similar quality if approved by the architect. Men of the successful executive type, such as corporation lawyers, chaplain's assistants, big business men, and crapshooters, however, would not be satisfied with the standard layout. After careful research, study, and extensive traveling in the Southwest Pacific, I feel, as a specialist in foxhole design, I can safely recommend the improved de luxe dugout, as follows:

In jumping, the owner passes a photoelectric beam which opens a flush panel door. This door should be painted maroon, three-coat eggshell finish. The walls are covered with pale green (pastel) glazed tile or honey-colored travertine. Indirect fluorescent lighting provides for a pleasant, intimate atmosphere. For the period of the air raid the owner can recline on a couch and enjoy home movies.

Eventually he will get so used to the comforts of a foxhole that he will want to take it along wherever he moves. The author is working at the present time in his foxhole studio on the design of a portable, prefabricated model. It will then be possible for the owner to take the foxhole right back to his penthouse apartment in New York City.

T/Sgt. ERNEST A. JACOBS (USA)
Somewhere in the Pacific

With a Tokyo-made 50-Centavo Note

Dear Editor:
Enclosed is payment for PENCIL POINTS as per enclosed bill. The August issue arrived just before I left New Guinea. It had been 3 years since I had read an architectural magazine and it was greatly appreciated. I stored it in the pocket of my bedding roll to have more time to absorb it in the Philippines, but the first night I slept on the bedding roll the tail end of a typhoon hit me and overflowed my hole in the ground. The magazine was in bad shape, so I left it at the native house nearby. In a few years the architecture of this island may show a decided modern trend in the use of bamboo and coconut fronds.
Lt. Col. JAMES E. BRANCH, F.A. (USA)

EDUCATING THE PUBLIC

Dear Editor:

I wish to express the profound appreciation of the Planning Commission, and of myself in particular, for the very excellent job you did in the December issue of your magazine of organizing and publishing a report on our Civic Center project. We have received many compliments on it. Your organization of material exceeded our fondest expectations and we are very grateful to you.

We received the sets of over-run sheets, and wish to thank you for sending them. They will be of great help to us in educating the public on the project. Thank you again for the excellent job of publication.

ARTHUR D. MCVOY
Director, City Planning Commission
City of Portland, Oregon

(VIEWS continued on page 10)

JOBS AND MEN

Postwar Employment Service

NOTICE: *Advertisements for this section must be addressed to* Jobs and Men, C/O PENCIL POINTS, 330 West 42nd St., New York 18, N. Y. Legible copy accompanied by check or money order for $3.00, will be accepted not later than the 10th of month preceding publication. Advertisements should not exceed 50 words.

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ARCHITECTURAL DRAFTSMEN wanted for permanent employment on private and public work, in office located upstate New York. Must be familiar with all phases of architectural drafting. This is an excellent opportunity for the present and postwar period. Write education, experience, and salary desired to Box 127, PENCIL POINTS.

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Views

(Continued on page 8)

Are You Terribly Sure?

Dear Editor:
PENCIL POINTS fine—but the architectural layouts and lettering are terribly lousy—general opinion of most architectural designers out here.

PIERRE WOODMAN
Santa Fe, N. M.

Handed Along by Roland Wank

Dear Mr. Wank:
My attention has just been called to your article entitled "Integrated Design Is a Joint Responsibility" which appeared in the October issue of PENCIL POINTS. I wish to congratulate you on this very fine article. The question of integrated design as you have discussed it has often been overlooked by many builders and sometimes by architects; in fact, we have frequently been called upon by architects to assist them in the design of interior lighting systems after the architect has decided on certain construction features which limit the possible effects and advantages of good lighting.

Light sources such as are available today readily adapt themselves to equipments which can be built into all kinds of structures. In particular, fluorescent lamps in a troffer type unit can be made an integral part of the ceiling and have been used quite extensively with other ceiling constructions. You, no doubt, have seen our discussions along this line in our *Magazine of LIGHT*. The Irving Trust Company of New York City illustrated in your article is a good example of a ceiling design using filament lamps, and one could cite many other examples where the architect has more or less built the lighting into the ceiling and the side walls. In general, however, we do not believe designers have taken advantage of the opportunities in integrated design as it may be applied to lighting equipment and construction. Your article is, therefore, extremely timely as regards lighting and I am sure it is equally timely for the many other equipments such as air conditioning, heating, etc., which must be built into the building.

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NOTICES

JOSEPH H. MESSINEO AND RICHARD DANTE MESSINEO have opened an office in the Clarke Building at Las Vegas, Nevada, for the practice of architecture, specializing in dude ranches. Other members of the firm of Messineo & Messineo, Architects, are D. C. Messineo and Emil J. Messineo, both serving in the armed forces.

COSSA, ELLSWORTH & SCHLICHER, Architects, announce the opening of offices at 226 South 15th St., Philadelphia 2, Pa.

NORMAN PRESCOTT RANDLETT, Architect and Engineer, announces the reopening of his office at 614 Main St., Laconia, N. H.

NATHAN A. SEIDERMAN, Architect, announces the opening of his office at 45 John St., New York 7, N. Y.

J. A. EDDINGTON, architectural model maker, has announced the opening of a new studio at 6770½ Hollywood Boulevard, Hollywood 28, California. A new member of his staff is Miss Patricia Davis Manthos, designer and model maker formerly with Ernest T. Davis, Washington, D. C., architect, and at the Army Engineers model shop at Fort Belvoir, Virginia.

OSCAR FISHER, Designer, announces the removal of his offices to 154 Nassau St., New York 7, N. Y.

THOMAS K. HENDRYX, A.I.A., Architect, announces the reopening of his office at 165 Interstate Parkway, Bradford, Pa.

(VIEWS *continued on page 12)*

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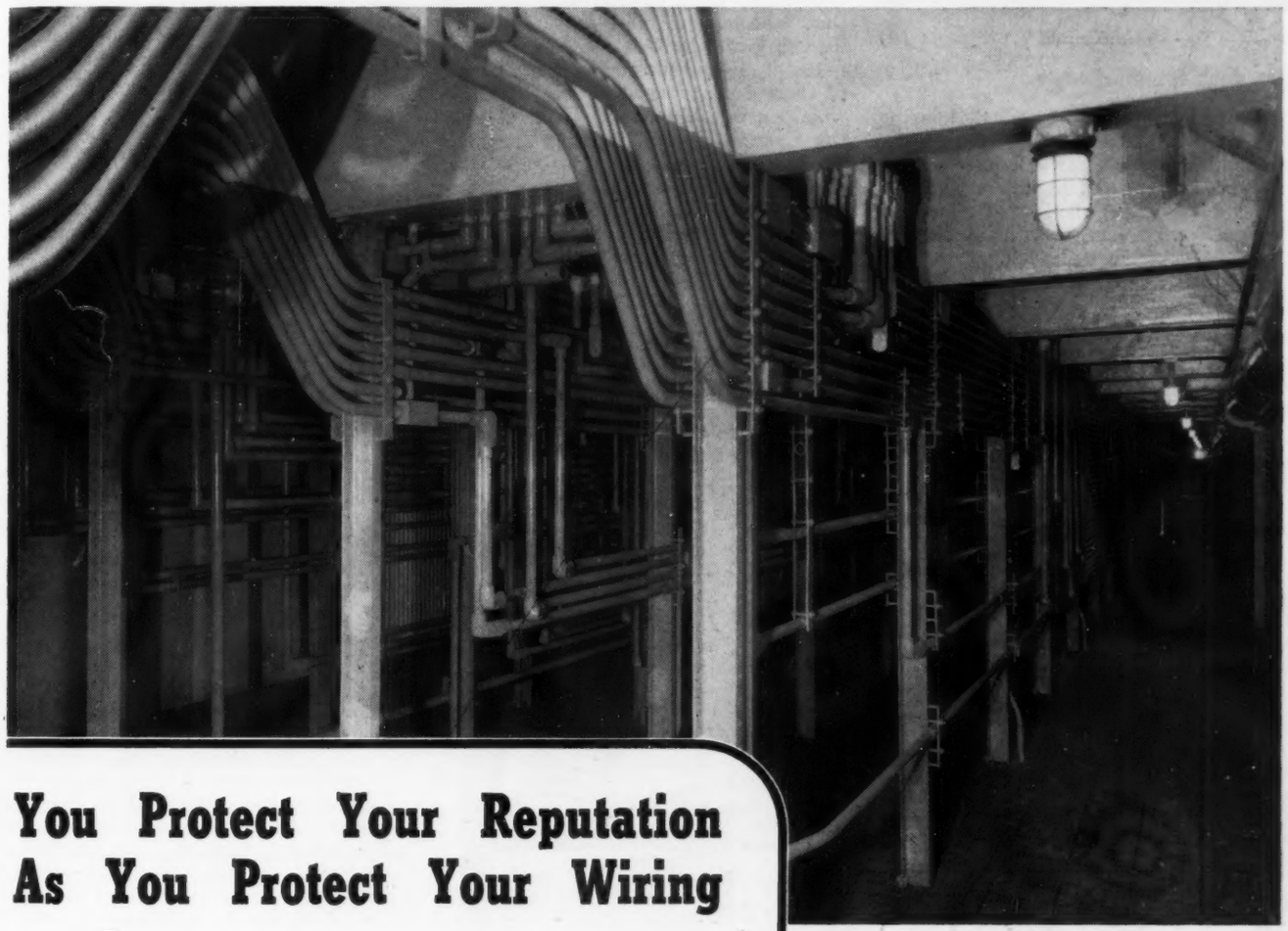

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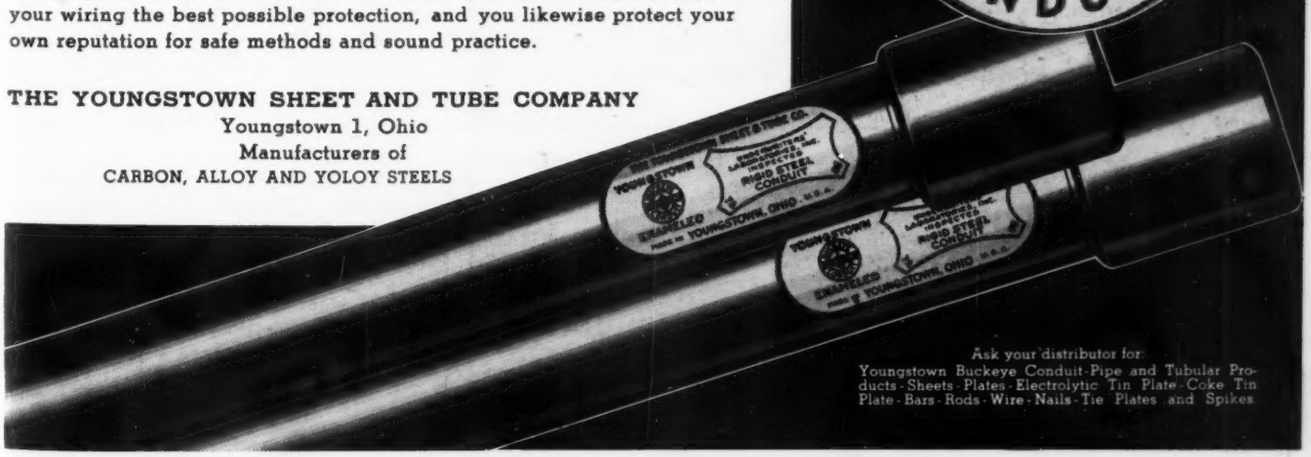

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Views

(Continued from page 10)

Six Jobs for the People

One well-coordinated national housing agency with constituent organizations to tackle specific postwar housing needs has been advocated as the mechanism to end "a great deal of back fence bickering of a very unpleasant nature" between separate Federal agencies concerned with housing.

Appearing before Senator Taft's Sub-Committee on Housing and Urban Redevelopment, of the Senate Postwar Planning Committee, Mrs. Samuel I. Rosenman, chairman of the National Committee on Housing, Inc., testified that "the housing problems of all . . . income levels have a common denominator of mutual interest and . . . no one of them is untouched by the problems which ensnare the others." She assured the Committee that it is of primary importance to make certain that Government functions related to housing are properly coordinated *and* prepared for efficient operation as soon as the war ends. The Committee also should be concerned, she pointed out, with over-all housing policy and the instruments which will aid the nation in attaining well-conceived homes, a sound building economy, and maximum employment in the construction industry.

Stating that NCH believes that "it would be sheer folly to try to meet the very difficult problems which will be presented in the years following the war without the aid of a national housing agency," Mrs. Rosenman outlined 6 national postwar housing problems requiring prompt consideration. Her suggestions follow, *in part:*

"1. The first problem is the age-old one of finding a means of supplying adequate homes to income levels which have not in years gone by been able to purchase or rent homes of acceptable standards. This problem is equally challenging to those who make a business of manufacturing construction materials, to those who make a business of selling land, to those who make a business of building homes, to those who make a business of lending mortgage money and to those who are socially and civically aroused by the conditions under which millions of citizens of a prosperous democracy must live . . .

"The private builder must be encouraged to build quantities of adequate low cost housing to reach ever lower costs. He must be aided through the development of new and improved construction materials, equipment, and methods. The National Committee on Housing recommends in principle the establishment of a Federal program of research and study as a service to the home building industry and the home purchaser in order to encourage private research and to supplement private research by providing for the study of those things which private industry does not undertake.

"The private builder must also be aided by any sound financial innovations which may from time to time be devised. However, great care must be exercised to guard against well packaged ideas which may raise the quantity of building but which may sow the seeds for future financial and social headaches. In making new policies, it must be remembered that there will be fluctuating business cycles in this country.

"2. The second problem is not age-old. It is war-born. It is concerned with the postwar provision of homes for millions of people who cannot for a while be certain of the location of their occupation and therefore cannot be certain of their permanence in a specific locality. . . . For some years after the war this country is bound to have great migrations of its people. The war worker and the member of the armed forces each will have to find his niche in peacetime industry which will be adjusting itself some years after the war to a peace-time economy, to the changes which will take place through technological developments, and to the changes which will take place in world com-

(VIEWS *continued on page 14)*

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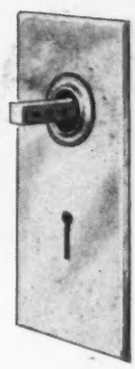
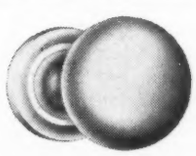


Williamsburg design in polished cast brass



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DISTINCTIVE HARDWARE

Views

(Continued from page 12)

merce and in the commerce between the various regions of this country. In increasing the supply of homes during that period, the production of rental as well as sale housing must be encouraged so that those who are not certain of their employment future may not be compelled to buy. . . .

"3. The third problem which must be faced is the quality of the house. There are two forces which are readying themselves to drag down the quality of houses to be built for families of medium and lower income.

"The first of those forces is the increasing cost of the house. . . . The second of those forces is the presence of billions of dollars of savings in the vaults of financial institutions. Those dollars look for investment. The institutions which hold these dollars may compete with each other for outlets. In the competition for mortgages some of them may not inquire too carefully about the standards of the houses upon which they take mortgages.

"These two forces are aided and abetted in many localities by a lack of local regulations which would prohibit substandard construction. Localities should be encouraged to make regulations which prohibit shoddy construction and financial institutions should be discouraged from making loans on shoddy construction. State and Federal supervisory agencies should stimulate increasingly higher standards of appraisal practices, home building, and site and subdivision planning for the benefit of the mortgage lending-institutions, the community and the home purchaser.

"4. The fourth problem is one of encouraging home maintenance so that future blight may be avoided. This subject has particular significance at this time when the difficulties accruing from past failure to maintain property cause so much consternation. The home owners of this nation must be made aware of the dangers of failure to maintain property; the communities must be made aware of the problems they face by failure to require maintenance; the financial institutions must be made aware of the dangers they face by failure to require maintenance.

"5. The fifth problem is that of urban redevelopment. While that problem entails more than rebuilding homes, it must be linked to housing considerations because the predominant interest is a housing interest. Any Federal or State legislation to provide aid for the acquisition of deteriorated areas should include definite provision for the adequate rehousing of displaced families. But the redevelopment of substandard urban areas must not be confused with a separate and distinct problem—the housing of families of low income. Many of the families who live in substandard areas have incomes which exceed the top limit set by local housing authorities. Many of the slums already cleared have sent families scurrying through their city in search of something adequate supplied by private enterprise. Any large redevelopment program carried out throughout this country would displace millions of families who should be served by private enterprise.

"6. There is a sixth major problem—that of rural housing. Unfortunately we are not prepared at this time with an analysis of its requirements. That is not because we find the problem less pressing, but because we find that there has not yet been sufficient consideration of the subject. We urge that consideration. We will send this Committee any data which we develop on the subject."

BETTER WORKING CONDITIONS

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NOTICE

ISABEL BARRINGER, former Vice President and Director of Dorothy Draper, Inc., and THEODOR MULLER, former Production and Design Manager of Dorothy Draper, Inc., announce the opening of MULLER-BARRINGER, Designers, 111 West 57th Street, New York, 19, New York.

(VIEWS *continued on page 16)*

All production depends on it. In turn, it must be absolutely dependable for the life of your electrical system. The best, therefore, is none too good. For more than 50 years, back when electricity was just starting to walk, the Frank Adam Electric Company has been making switches and switchboards. The Shutlbrak Switch is our finest *operating* switch.

Sound engineering developed in the FA Shutlbrak Switch is a shuttle movement faster than the eye . . . silver on copper contacts under tempered steel compression within a completely insulated, damp-proof chamber . . . arcing tips away from contact points . . . contacts that improve with operation. These improvements alone revolutionized heavy industrial switching.

But we did not stop there. The patented FA Kamklamp fuseholder was designed to hold both ferrule and knife blade terminals in a permanent grip. For low resistance, positive cable connection, FA Shutlbrak Switches are equipped with FA Pressure Type (solderless) Connectors.

If your installation calls for quality equipment, see our local representative. His years of experience are at your service. Write for his name and address and Bulletin Number 70 describing Shutlbrak Switches, Switchboards and Panelboards.

Frank Adam Electric Co., Box 357, St. Louis, Mo.

Makers of Busduct, Wire and Cable Duct, Switchboards, Panelboards, Quikheters, Service Equipment and related items.

FA PRODUCTS .. *The Sign of a Better Job*"

Views

(Continued from page 14)

THEY SAID—AND WE QUOTE:

We cannot compress our industrial civilization into one of the ancient patterns—feudal or monarchial or mercantile. We have more than once tried to imprison the stream of our culture, as we have imprisoned the stream of architecture, only to create new floods as our feeble barriers of romance gave way. The past will live with us as behavior, custom, common sense, and binding tradition, but these must be built into a new fabric and made valid within it. The creation of that fabric is the central problem of our time.

Joseph Hudnut
Dean, Harvard Graduate School of Design

Upon the manufacturer of building material, home furnishings and home equipment . . . devolves the responsibility of bringing the vital importance of home building to the public as well as offering of better products, in order to offset the illusive mirage of the "miracle" home. There is definitely a "want" for new homes. The "want" must be intensified into a feeling of *need*!

W. H. Upson, Jr.
UPSONIZER, *October*

Fewer than half of the families intending to buy or build a new home immediately after the war will be able to carry out their plans during the first postwar year. . . . Even though production of building materials and equipment can be resumed on a full scale soon after the final end of the war, the volume of new residential construction during the first 12 months after Japan is defeated will be limited because building contractors and home builders will need considerable time to reassemble their organizations and undertake extensive construction.

Irving W. Clark
Chairman, Residential Committee
The Producers' Council

Public housing, which has pleasantly surprised many realtors by the stimulating way in which it reacted on neighborhoods and property values, has come to stay. Even Wall Street sings its praises and vies for its securities. Public housing is now challenging private builders to take care of the next higher income group (directly above the lowest). With the rapid advances in construction technology, and with guaranteed annual wages on the horizon, the challenge may yet be met. If not, we can expect and should help fill this vacuum in the housing field.

H. Robert Mandel
Realtor, New York City

It should be evident by now to everyone that this war has not been thought through; that the peace has not been thought through; and that plans for the postwar era have not been thought through. There is too much airy, irresponsible promising and too little practical, down-to-earth reasoning.

Sen. Kenneth S. Wherry (Rep., Neb.)
(To: The American Tariff League)

Actually, it is true, there may be no miracle house forthcoming for John Doaks, but there is no harm in John Doaks believing that there is or could be. There are no OPA ceilings and no WPB priorities on dreams, and, as of the present writing, they are not taxable. Moreover, if the building industry can give J. D. no more in the future than it has given him in the past he might just as well dream. Housing devoid of imagination and real value is practically all that he has known in the past, and there are people who would have him continue to live in the outworn patterns of architectural indecency, mechanical obsolescence, and financial chaos forever.

Percy Cashmore
in The Blueprint, December

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It's *Scientifically Processed* for Toughness and Durability!

YOU use reenforcing to give concrete strength. And to give SISALKRAFT its strength, sisal fibre reenforcing is used.

The closely spaced fibres are at right angles to each other, embedded in two layers of asphalt and sealed, under heat and pressure, between two sheets of kraft paper, to make a tear-resistant, weatherproof covering of unmatched dependability.

SISALKRAFT Resists Tearing Costs Less to Apply!

No batten strips are needed with SISALKRAFT. Large headed roofing nails hold it in place. An unbroken "blanket" of SISALKRAFT protects sheathing and wood framework, shuts out wind, dirt and moisture. Specify SISALKRAFT over sheathing — as flashing around all window and door openings — under floors and roofing — as a vapor barrier over the inner side of studs before lath is applied.

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Specify time-tested SISALKRAFT. *Its unmatched performance has been proved for 25 years.*

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Advanced design makes Bankers Life structure "The Building of the Decade"

Section of a typical workroom. Through millions of tiny perforations in ceiling, fresh, conditioned air is introduced into the room at rate of four tons a minute.

Tinsley, McBroom & Higgins, architects; Charles S. Leopold, consulting engineer; and The Pennsylvania Engineering Co. of Philadelphia, contractors for the entire air conditioning system.

Air Conditioning System a Triumph of Engineering Ingenuity!

Completed in 1940, the Bankers Life Building of Des Moines, Iowa, is a model for postwar planners. It is ultra modern from its structural design right down through to its air conditioning system which is an integral part of the structure.

A unique feature is a wall warming system that works as a complement to the air conditioning and is designed to make every square foot of floor space comfortable and usable.

Refrigeration for cooling water (to condition air for distribution through the perforated ceilings and for circulation through the walls) is handled by three Frick compressors, two 4-cylinder and one 2-cylinder. Each of the 4-cylinder machines is directly connected to its own evaporator and condenser, and the 2-cylinder machine may be used in conjunction with either evaporator and condenser unit, or the entire plant may operate as a unit. "Freon" refrigerants are used.

Total capacity of the refrigeration plant for summer air conditioning, including reserve, is 650 tons. The air conditioning is completely zoned and each zone is subject to independent thermostatic control — allowing for variations in outside temperature due to sun and prevailing winds.

By making possible greater cleanliness, lower maintenance costs, increased comfort, and more satisfied employees, air conditioning will be one of the essentials in all types of industrial postwar structures. For helpful reference data on "Freon" safe refrigerants write: Kinetic Chemicals, Inc., 10th and Market Sts., Wilmington, Delaware.

"Freon" safe refrigerants are widely used in heavy-duty refrigeration and air conditioning systems.

KINETIC

FREON *safe refrigerants*

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"Freon" is Kinetic's registered trade mark for its fluorine refrigerants.

News

Design and construction

Developments afield

Building Regulations

Related Professions

Products Progress

Construction of 3,050 new airports and improvement of 1,625 existing fields, at an estimated cost of approximately $1,251,600,000 has been recommended to Congress in a National Airport Plan prepared by Civil Aeronautics Administration and presented by the Secretary of Commerce.

Aside from the cost of clearing, grading, paving, lighting, and radio facilities, it is contemplated that about $230,000,000 of the total will go to land and buildings, other than hangars. A system of Federal aid, matched by funds from the States, was proposed to finance the program over a period of from 5 to 10 years. An immediate appropriation of $3,000,000 was asked for surveys and other preparatory work.

The CAA study lists communities where airports should be constructed, and the number and classes of such airports, without indicating specific sites. In preparing the survey, CAA considered population, trade, mail, airline traffic, route applications, and other economic and geographic factors. It is proposed to provide numbers of new airports for metropolitan areas and at the same time to set up facilities for those vast spaces where the airplane is the logical means of transportation.

Lengths of sewer pipe, rocks firmly mounted, and sections of cinder block wall have been provided as experimental playground equipment at Fort Greene Houses because Jacob John Spoon, landscape architect of the New York City Housing Authority, noticed on one of his inspection trips the fun youngsters found playing in sections of drain at a storm sewer excavation.

Fashioned from non-essential materials are Tunnels (sewer pipe sections), Playlogs (oak logs 12 feet long raised a foot from the ground on log standards), a Dodger (a random pattern of low walls whose corners and small enclosures are popular play spots), and a Whatnot (a pyramid of steps against a wall). Catharine Lansing, who directs community planning for the Authority, developed these playground ideas and the Authority proposes to continue experimenting with safe playground equipment that will stimulate the imagination of the children. Many seem to prefer these to conventional playground devices.

Creation of complete, integrated residential communities that will offer sound investments for home buyers was a major topic of discussion last month at the annual convention of the National Association of Home Builders, in Chicago.

Representatives of all fields within the construction industry gathered for the meeting—evaluated by FHA Commissioner Abner H. Ferguson as "important for the industry, for the consuming public and for the Government"—and distinguished speakers addressed the assembly of more than 3,000 delegates, architects, and other guests. Expressing concern for the results of haphazard growth of communities and cities in the past, the men who will build millions of new homes in the next decade listened to the experts and contributed their observations in a series of panel discussions of hundreds of phases of the construction industry.

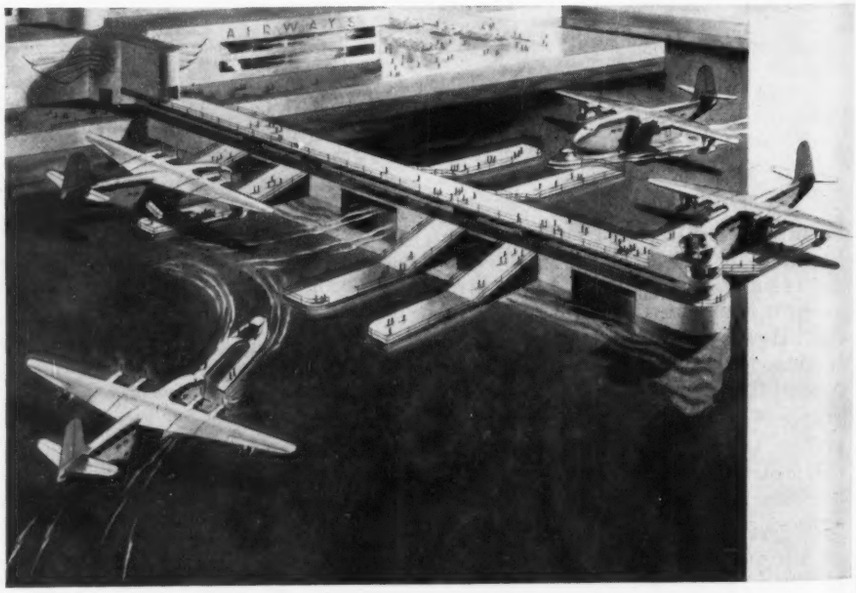
In preparation for the annual convention, N.A.H.B conducted a sample survey that revealed members particularly interested in heating, insulation, air conditioning, and kitchen design. Their preferences were recognized in setting up exhibits at the convention.

Robert P. Gerholz, N.A.H.B. president, told the delegates he had learned from visiting 65 strategic war centers in the past year that we are now in the early stages of "titanic inter-city and intersectional struggles over the resettlement of the nation's population." He predicted these struggles will intensify when dismantling of war industries begins, with the consequent population shifts. He urged those attending the convention to pay close attention to panel discussions and to the exhibits, congratulating the builders on their "eagerness to get back to school." He declared: "The best homes in the world are American homes—your own products—but you restless builders know that the best home in America has not yet been built."

The builders were warned by John B. Blandford, Jr., NHA Administrator, that "because of a turn in the war, major attention must divert for a period to the old H-1 (war housing) front, but we still have our new supply line for materials and at the earliest opportunity we will resume the advance on our new H-2 (housing for congested areas) front." He reiterated his belief that the Federal Government should get out of the job of programming housing and of regulating the use of war housing, at the earliest moment compatible with the war effort. He cited, however, a companion responsibility of the Government for assisting in every possible way the orderly reconversion of the housing industry from war to peace.

The builders were told by FHA Commissioner Ferguson of the system of standards developed by FHA, divided into three general categories. He discussed for them standards of structural elements (minimum construction requirements): property standards (general elements of design and layout); and land planning standards (providing adequate streets, sidewalks, utilities, etc., to insure a satisfactory property that will be an acceptable security for a long term mortgage). In the last category he included accessibility to employment centers, community facilities, and transportation.

(Continued on page 20)



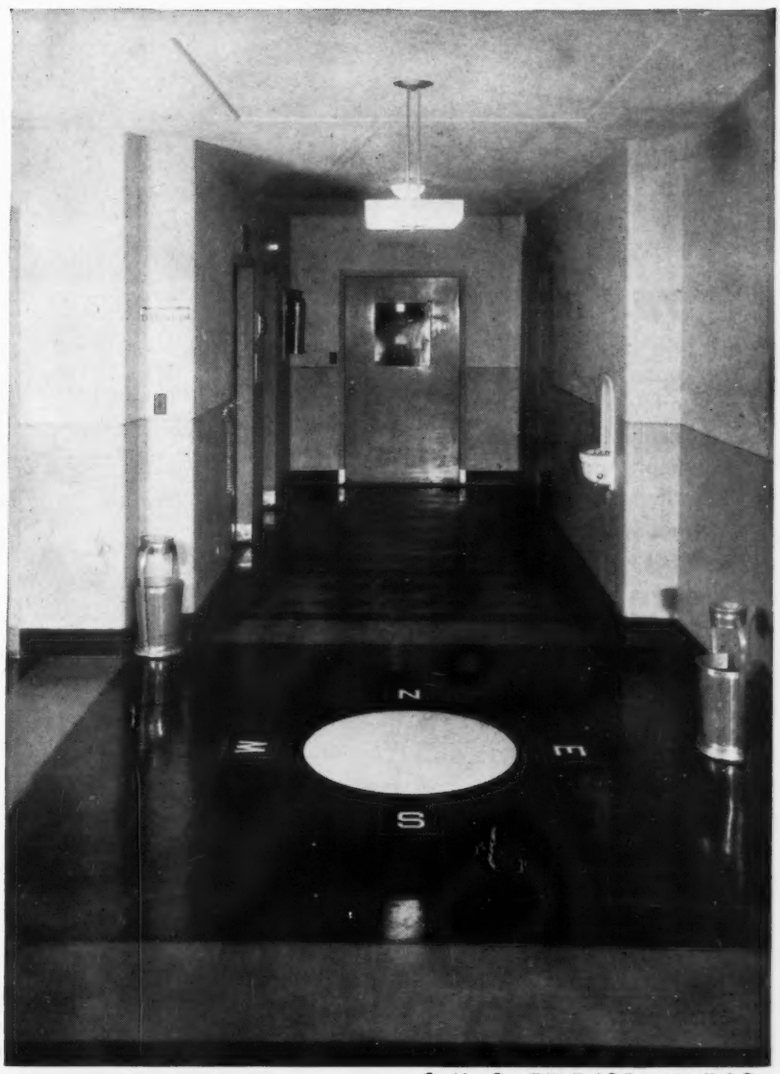
Envisioning inner-harbor flying boat terminals, Glenn L. Martin has offered some interesting ideas for handling laden aircraft at river or lakeside airports. One of these is the pier shown in this rendering with attached floating tidal docks forming slips for the big flying boats. These could be towed into the slips by horseshoe-shaped tugs, which then could run under the pier and be free for another tow. Martin considers that this offers a practical means of providing water landing facilities without excessive cost—so that the large flying boats will not have to await the completion of elaborate airport projects.

The Importance of an Education Underfoot

Architects appreciate the importance of getting the basic facts about school flooring because school floors take more punishment, year in and year out, than any other part of a school building.

Millions of square feet of Tile-Tex have been specified and installed in school buildings in the past twenty years. Millions of square feet of school flooring will be specified for use in post-war schools. Many architects will specify Tile-Tex Asphalt Tile because they *know* it's got what a school floor has to have in order to perform properly.

Tile-Tex floors are slip-safe—they're easy to clean and keep clean—they have an exceptionally long life—they're highly fire-resistant—they fit lean budgets because they're low in first cost—and, in addition, they're attractive in appearance.



Corridor: Cornell Medical College, New York City
Coolidge-Shepley, Bulfinch & Abbott, Architects

Tile-Tex will be a better floor for schools than ever before, after the war, due to constant research. Specify it now for the schools you are planning and if we can help you in any way let us know.

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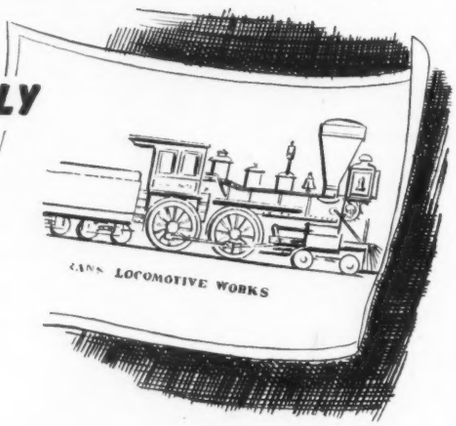

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TRACING CLOTHS

AMERICA'S STANDARD FOR OVER 20 YEARS

News

(Continued from page 18)

While the builders were talking about controlled communities, Commissioner Ferguson pointed out that there is evidence of indiscriminate purchasing of lots in certain areas. He added: "Unthinking buyers are under the impression that they will be able to start building immediately after the war, which is very doubtful. Unfortunately, scores of large tracts of land have been cut up and disposed of in this way by thoughtless or careless operators."

Similarly while Douglas Whitlock, president of The Producers' Council, was telling the builders that "only time will tell" whether a total of 5 million new homes in six postwar years will be achieved although 10 million housing units will be needed by 1952 by nonfarm families, the convention heard R. J. Thomas, president, U.A.W.—C.I.O., say: "I have no doubt that there will be many among you who will think that the home building industry, which often has produced only a half million houses a year and has never built one million houses in a year, cannot employ two and one-quarter million full time workers or build one and three-quarter million homes per year.

"There were many who could not imagine and who would not have believed in 1940 and '41 that we could and would, since then, train and transport the millions of service personnel now serving throughout the world, and at the same time supply them with the unprecedented quantities of ships, planes, tanks, trucks, guns, ammunition, food, clothing, medical supplies, and an endless number of other different and necessary items of production. We were then, and we still are, in a fight for survival. When this war is won, the problems that will confront us will be different from the problems of war, but they will be no less great and no less difficult to solve. They will be solved, however. *Men, means and measures will be found to solve those problems and keep this country strong.*"

Other speakers included Seward H. Mott, director, Urban Land Institute; Gabriel C. Harman, Chief Land Planning Consultant of FHA; and Frank W. Cortright, N.A.H.B. executive vice president, who saw as a "hopeful sign" the fact that manufacturers, dealers, mortgage brokers, labor representatives, and architects were all interested in meeting with the builders to plan for "the stormy years ahead" in the construction industry.

In connection with the convention, N.A.H.B. sponsored a national home design competition focusing attention on the

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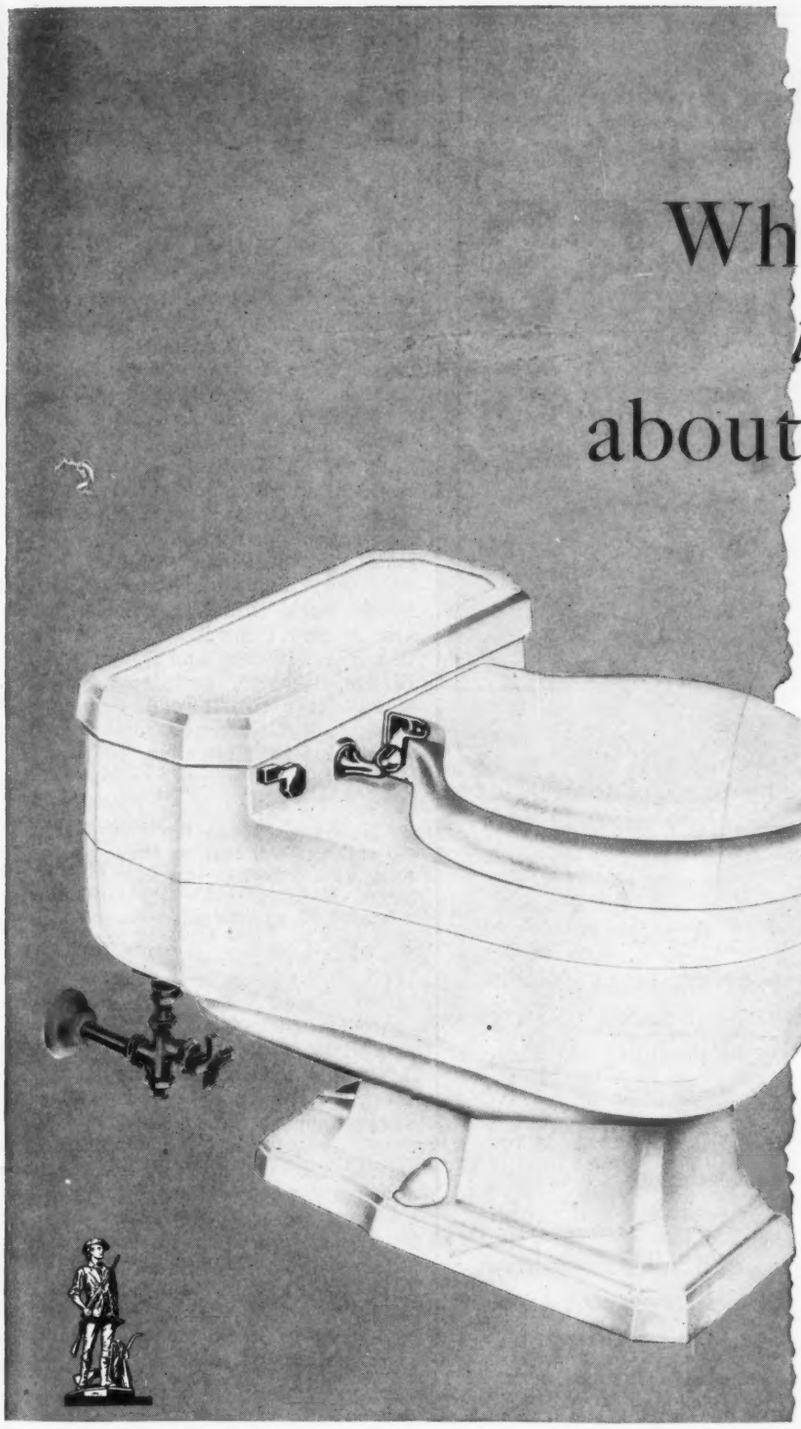

What the past *tells you* about the future...

The best attempts to picture the "Post-War" home are, basically, logical outgrowths of experience, of ideas and products that time has shown to be good. In a previous post-war period the "revolutionary" idea of a *one-piece*, *non-overflow* and *quiet* water closet became a reality when Case introduced the famous "T/N"—the outcome of experience and good ideas.

Winning immediate acceptance by the architect, engineer, builder and merchant plumber—and the home-owner—the "T/N" has become a mark of excellence in America's finest homes and public buildings, and at an average price of only $50 to $60. Our experience, and your own too, makes this a reasonable promise—that after the war the "T/N" will be better than ever. W. A. Case & Son Mfg. Co., Buffalo 3. Founded 1853.

Buy More Bonds!

Patented—Patents Pending

THE CASE **T/N** ONE-PIECE

The first and finest one-piece water closet... non-overflow and non-siphoning... quiet and efficient.

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News

(Continued from page 20)

needs of home owners in six principal classifications. Prize winning designs were exhibited at the convention. The classifications and winners who received $6,000 in U. S. War Bonds were as follows: "City Home," Selby Construction Co., Lakewood, Ohio, and Edward G. Conrad, Cleveland, Ohio, architect; "Suburban Home," Charles H. Scheiber, Chicago, and Arthur Schreiber, Chicago, architect; "Industrial Worker's Home," E. C. Mahoney, Chicago, and Braun and Del Bianco, Chicago, architects; "Farm Home," Charles Nixon, Glenview, Illinois, and Carl A. Kastrup, Forest Park, Illinois, architect; "Summer Resort Home," Earl Carrothers, Oak Park, Illinois, and Braun and Del Bianco, Chicago, architects; "G.I.Joe Home" (for two), Todd Tibbals and Associates, Columbus, Ohio, and Noverre Musson, Columbus, Ohio, architect.

On the theme, "Design for Living," some of the problems and subjects familiar to architects were presented last month in, of all places, MADEMOISELLE, the fashion magazine for young women.

To Elinor Hillyer, as "Design for Living" editor, goes credit for weaving into the stuff from which glamour is concocted such thought-challengers as Joseph Hudnut's "New Cities for Old," "A Guide to Housing Standards" by Marian Schomer Greene, and her own suggestions on housing and city planning—as well as selected architectural photographs serving as backgrounds for mannequins. The prefatory statement, which makes us yearn for more magazines of wide circulation that will help to stimulate interest in architecture and planning, points out that "all who are interested can play a part—as laymen or professionals—in the coming era of city planning. . . ."

Artists who have made prints of exhibition quality during the past year are reminded that the third National Pennell Fund Exhibition of Prints will be held May 1 to July 1 at the Library of Congress.

A maximum of five prizes of $100, ten of $50, and twenty of $30 can be awarded by the jury consisting of John Taylor Arms, Stow Wengenroth, and the Chief of Prints and Photographs Division, Library of Congress. A prize award by the Committee constitutes purchase of the designated print. There will also be, this year, a jury of admissions. Entry cards may be obtained from the Prints and Photographs Division, Library of Congress, Washington 25, D. C., and returned on or before March 15.

(Continued on page 24)

Plan for extra protection

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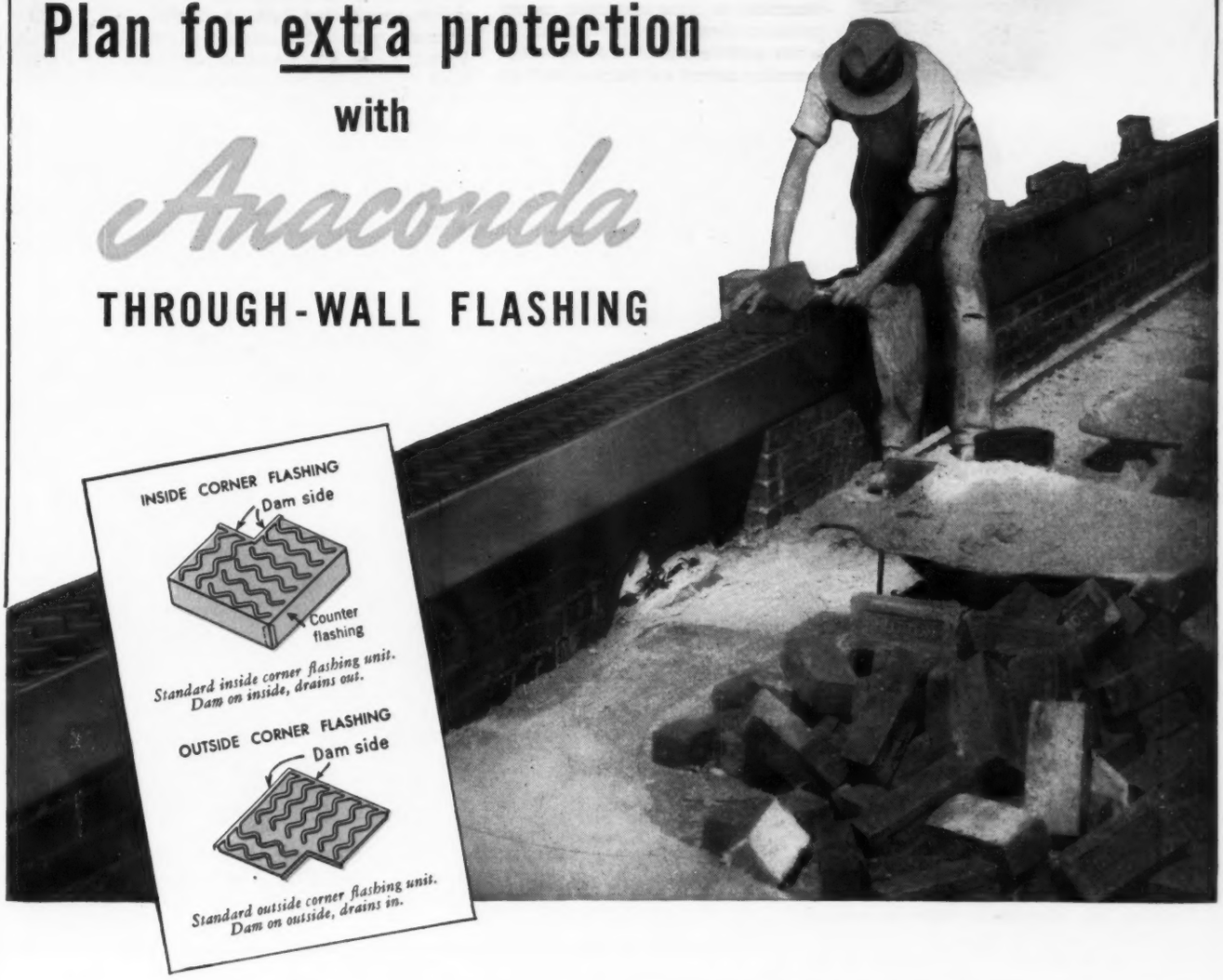
THROUGH-WALL FLASHING


INSIDE CORNER FLASHING
Dam side
Counter flashing
Standard inside corner flashing unit. Dam on inside, drains out.
OUTSIDE CORNER FLASHING
Dam side
Standard outside corner flashing unit. Dam on outside, drains in.

Anaconda Through-Wall Flashing is easily and quickly installed. Specially designed for the purpose, it offers extra protection advantages, and is adaptable to practically every masonry condition and through-wall flashing requirement.

Anaconda Through-Wall Flashing is made of 16 oz. copper—in 5 ft. and 8 ft. lengths—in a range of standard and special widths—including one-piece corner flashings. Bending and cutting can be done on the job.

Although not available today, Anaconda Through-Wall Flashing should be on your list of post-war construction necessities. Send for Publication C-28 or refer to Sweet's Catalog.

ANACONDA THROUGH-WALL FLASHING

—provides drainage in any direction, by means of an integral dam. *Drains dry on a level bed.*

—Zig-zag corrugations, 7/32" high, provide positive bond with mortar in all lateral directions.

—Flat selvage permits neat, sharp bends for counterflashing or locking to adjacent sheet metal without distorting the flashing or interfering with free drainage.

—Is easily locked endwise, even with edges bent, merely by nesting one or two corrugations. Such joints are watertight because of raised corrugations. 4432

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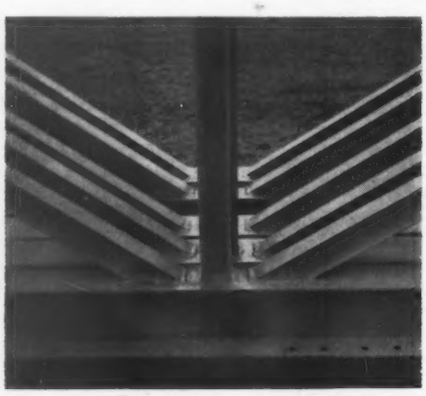
News

Products Progress

New Design for Welded Truss

A design for welded trusses of 50-, 60-, 70-, and 80-ft. lengths—in which (for the first time) H-sections with their webs in a vertical plane are used throughout without gusset plates—has been adopted by the Austin Company, Cleveland, Ohio.



This truss is adaptable to different loadings by changing beam weights used for the various truss members. By keeping the depths of the individual members constant, these variations require no shop-detail or fabricating-jig changes. The top chord, being a wide flange beam, can carry purlins at a variety of spacings without regard to panel points, and is also adaptable to continuous uniform loading; the bottom chord can carry loads at any point and can itself be used as a monorail. The H-sections are assembled in a jig, and welding is completed with the truss in a vertical position. Experience in the field proves the new design much stiffer than others and that steel erection work is made safer because of the flat top and bottom chords.

War-Developed Resin Glue

"Lauxite PF90-C" resin glue, originally developed for Army Air Force uses, has been found advantageous for prefabrication, veneering, assembly gluing, and laminating of soft woods. The glue is stated to be: boilproof; stronger than the wood by test; waterproof; withstands extended soaking in salt and fresh water; weatherproof; has long storage life; allows plenty of assembly time at 70°-75° F. After mixing of resin and hardener, the glue is ready for application by brush or mechanical spreader. Its manufacturers — I. F. Laucks, Inc., 911 Western Ave., Seattle, Washington—recommend it for fabrication of laminated arches and beams.

Quick Prints

Blueprints or black-and-white contact prints can be made in half a minute by a new portable printer, the "Spee-Dee," according to Peck and Harvey, 4327 Addison St., Chicago, Ill. Developing time for a black-and-white (by "Directo" process) is 10 seconds. The printer is available in two sizes: for prints up to 12″ x 18″, and up to 18″ x 24″. Actual printing surface is oversize on both. The model utilizes any standard electric outlet, 110 volts A.C. or D.C.

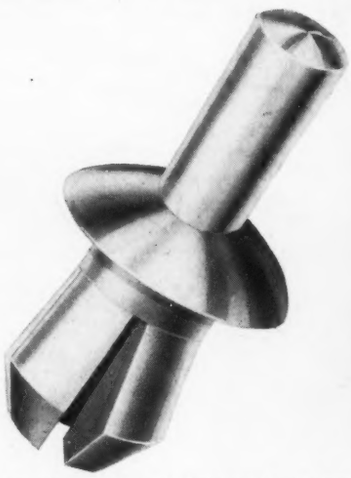
Washroom Improvement

Discreetly heralded as a "modern solution to a very old problem," a new self-raising toilet seat, "Model LP20," is announced by the Sperzel Company, 911 Hennepin Ave., Minneapolis 3, Minn. It is designed particularly for installation in public washrooms of industrial plants, theatres, office buildings, hotels, hospitals, state and governmental institutions. The sanitary open front and back construction has been retained from previous models, while the seating area in the new has been increased and reshaped to "follow the contours of the body perfectly." And (we don't mean to be funny, either) the new model is claimed to discourage waste of employees' time and to encourage clean habits.

New Plastic Blind Rivet

"Des-Rivet" is a new fastening device for many applications with metal, wood, and plastic components. It is molded as one piece, consisting of a head with plug attached by a thin breakaway section and a tapered shank split to form 4 tapered fingers; shank and head are hollow to same diameter as plug. The rivet is applied by pressing tapered fingers into a drilled hole; taper on the outside diameter of fingers reduces inside diameter of shank; impact from the rivet gun shears plug and drives it into plastic shank until plug is flush with both ends of rivet, maintaining the contour of rivet head. Complete installation is accomplished by this single operation.

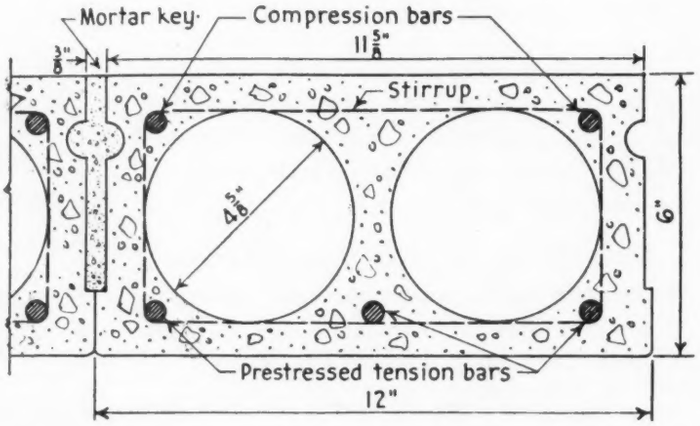
"Des-Rivets" are available in various shapes, sizes, and colors. Translucent properties of many plastics make it possible to combine improved functional value with decorative effect. The new



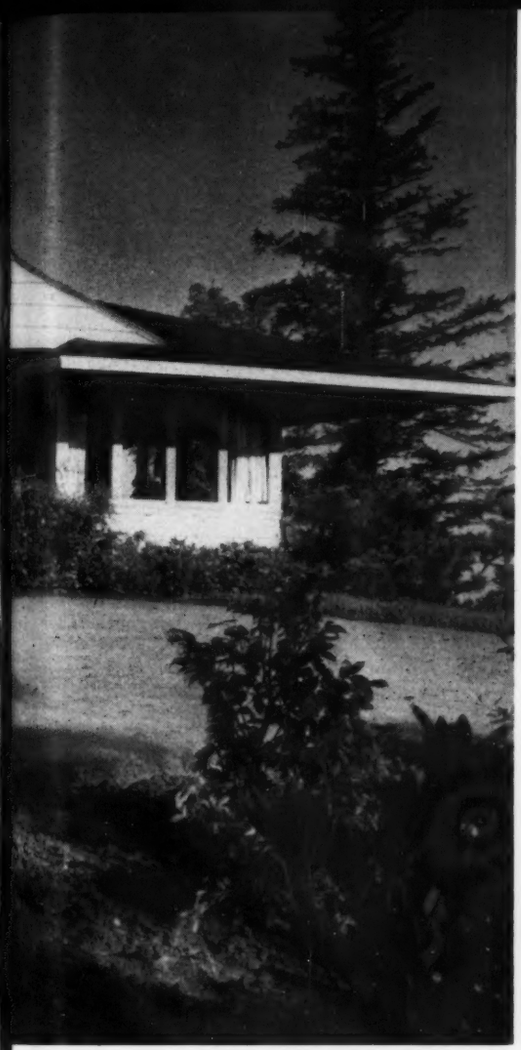
rivets are made by Victory Manufacturing Co., Engineering Dept. 1A, 1105 Fair Oaks Ave., South Pasadena, Cal.

Hollowcast Concrete Construction

"Flexicore" is the trade name for pre-cast reinforced concrete unit-type slabs or beams which, when assembled and grouted together, provide a lightweight floor or roof slab of strength and rigidity. The manufacturer is Flexicore Co., Inc., 220 E. 42 St., New York 17.



Pre-stressing of longitudinal steel bars running through "Flexicore" slab is said to add materially to structural strength, to eliminate shrinkage cracks, and to make possible longer spans (maximum load span, 22 ft. 6 in.). Precasting and precuring are important aids in cold weather building. "Flexicore" is also said to provide additional insulating qualities against heat, cold, and sound, and to aid in fireproofing.

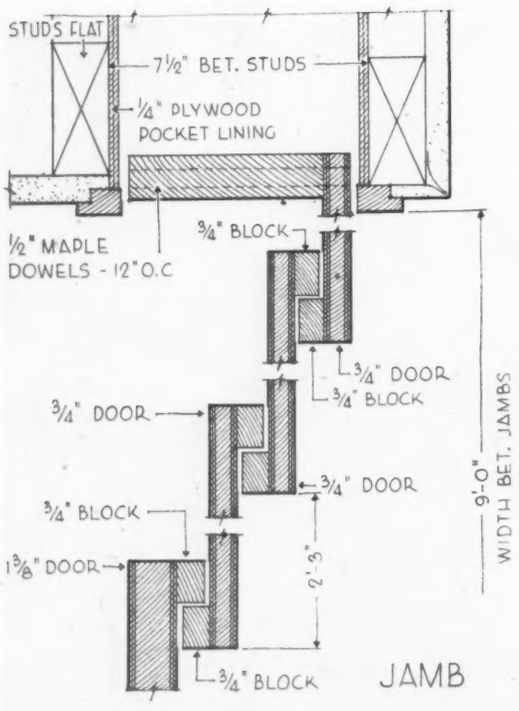


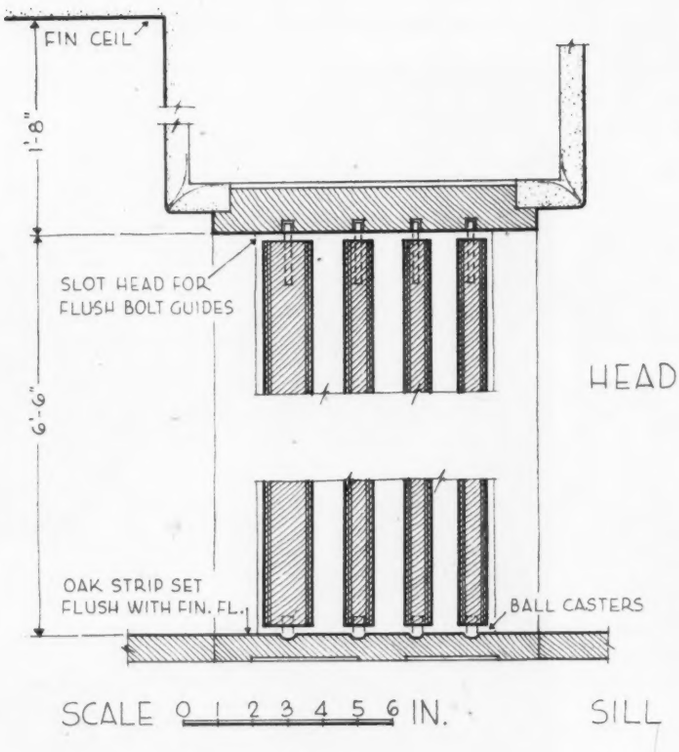
Living room looking toward the northeast

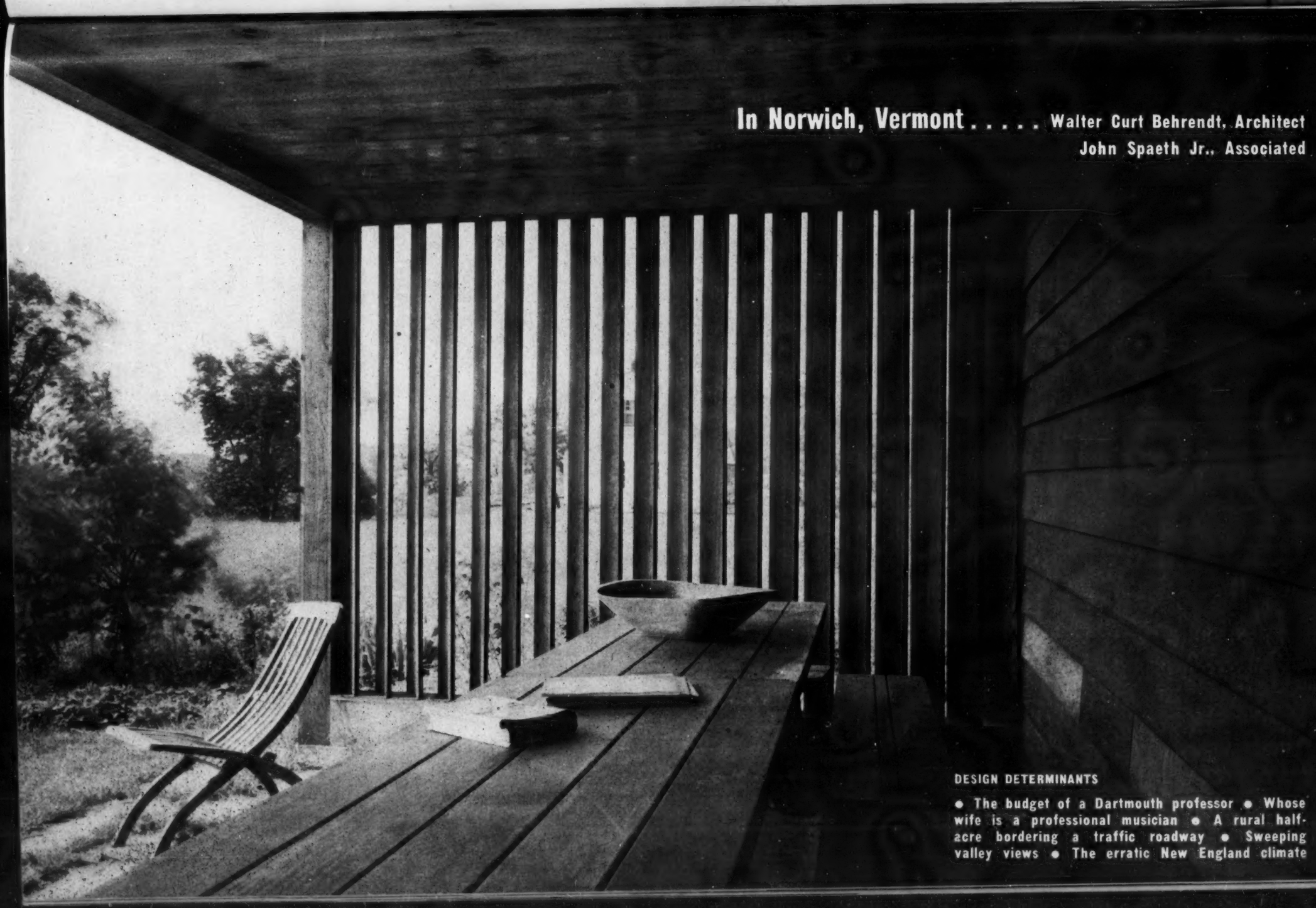
Beyond the fireplace are doors to the hall and living porch

The plate glass view-window corner of the living room

Sectional, Sliding, Partition
. . . . . Van Evera Bailey, A. I. A., Architect



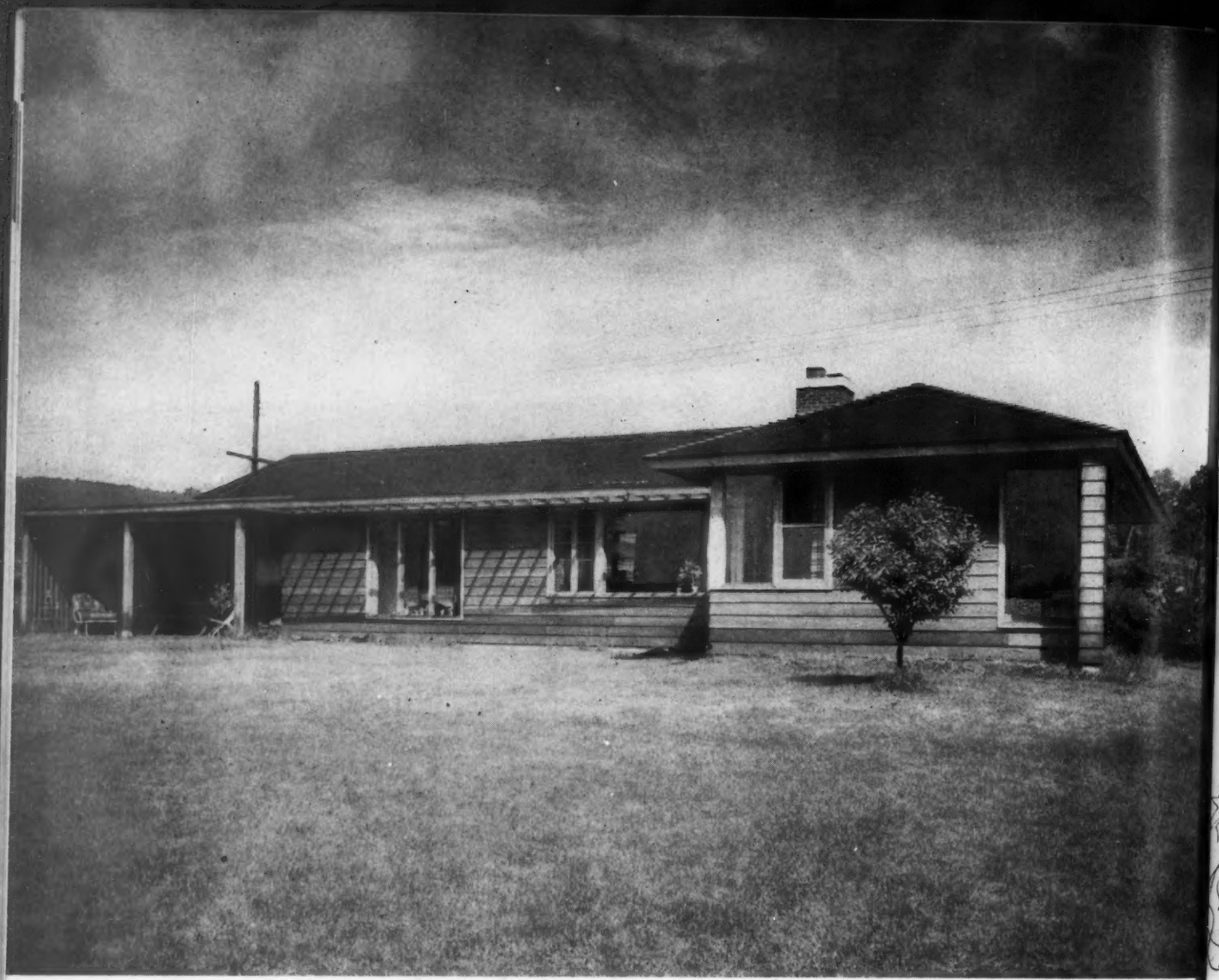




In Norwich, Vermont . . . . . Walter Curt Behrendt, Architect
John Spaeth Jr., Associated

DESIGN DETERMINANTS

• The budget of a Dartmouth professor • Whose wife is a professional musician • A rural half-acre bordering a traffic roadway • Sweeping valley views • The erratic New England climate



Photographs by P. A. Dearborn

Southern front, showing large window areas and projecting eaves that control amount of sunlight

Although basically a very humble structure, the home of Prof. Walter Curt Behrendt of Dartmouth and his musician wife is a stimulating contribution to the field of small-house design. Mannerisms and plagiarisms alike are avoided. The design of the house, planned for a couple who do all their own work, results directly from an honest effort on the part of Professor Behrendt and his associate, John Spaeth, Jr., to develop a scheme that would meet the family's living preferences as simply and fully as possible within a limited budget. As to the success of the effort, Mr. Behrendt modestly tells us: "No disadvantages have been noticed since we have lived in the house."

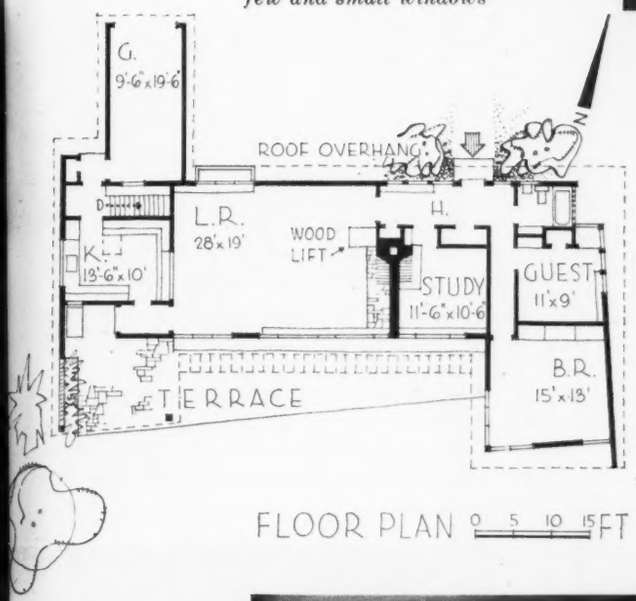
Toward the dining porch from the vegetable garden

The half-acre lot is on a ridge above the Connecticut River. A nearby road leads down to a bridge which crosses over to Dartmouth College, in Hanover, N. H., the owner's place of work—"only 15 to 20 minutes walking distance." Views open up on every hand—the foothills of the White Mountains to the north, the river valley to the south; toward the east (across the river) the Dartmouth campus, and toward the west, an intimate little valley dotted with old Vermont farmhouses. Although the house is convenient to his work, the architect points out, it is in a wholly rural setting and "grazing cattle may be seen from almost any window."

The house is located near the street both to cut down unnecessary road shoveling in winter and to provide as much space as possible for the lawn and flower garden on the south. Yet a third reason for this location was to eliminate a view of railroad tracks which border the river below.

WALTER CURT BEHRENDT, ARCHITECT
JOHN SPAETH, JR., ASSOCIATED

The northern front has few and small windows



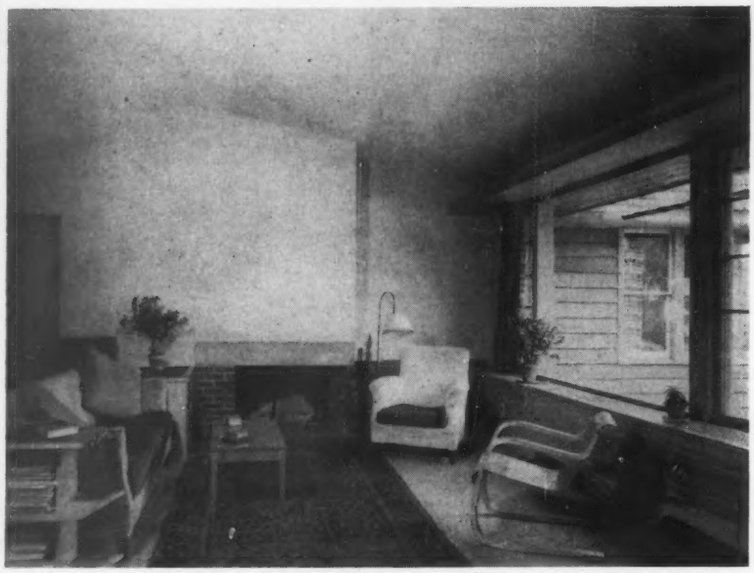
The living-dining room, at the center of the house, has cross light and ventilation. The roof projection over the great windows in the south wall works on the solar principle to exclude sun in summer and admit its warming rays in winter.

Separate functional areas in the room were given careful study. A sofa is placed beside the fireplace facing the window and view. "When a group has formed around the fireplace, newcomers do not cross the area, but enter it from the interior of the room." This easy accommodation of guests is an important factor in the Behrendt house, for not only do college students come to call or hold informal discussions, but groups frequently gather to enjoy Mrs. Behrendt's piano playing. A nice provision of the fireplace area is a wood box with a trap door in its floor through which firewood stored in the basement is readily handled.

The well equipped small kitchen has space for a breakfast table; the garage entrance and stairs to the base-

A pass window from the kitchen simplifies serving of outdoor meals

WALTER CURT BEHRENDT, ARCHITECT
JOHN SPAETH, JR., ASSOCIATED



The fireplace corner, protected from cross traffic by placement of sofa

ment (which extends only under the living room area) are both reached via the back entry without going outdoors. The living-dining porch leads off the dining corner of the living room. Food can be directly served to the porch table through a window opening into the kitchen. To shield the street, yet not exclude the view, the outside end of the porch is made of a screen of vertical boards, which are placed at an angle.

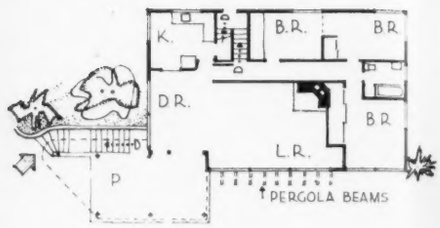
The study-guest room is, according to the architect, a satisfactory combination of functions: "I will not work, anyway, when we have a guest in the house." Closets line the entrance hall, and in the master bedroom are several more closets, one arranged with space at the bottom designed to accommodate a sewing machine.

Of simple frame construction, the house is thoroughly insulated with blanket-type material in both walls and roof construction. Exterior siding is California redwood applied with copper nails; trim is clear white pine. Roofing is of shingles impregnated for fire resistance. Interior woodwork is western pine, and the living room has ¼-in. plywood paneling. All other room walls are plastered; floors are oak.

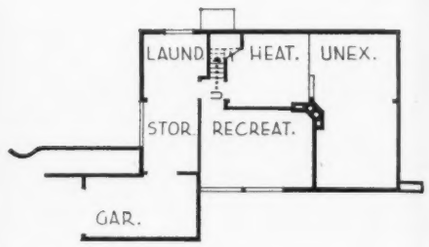
The dining corner of the plywood-paneled living room. Sliding cupboard doors that open through to the kitchen facilitate meal serving. The door at left leads out to the dining porch

A wall-height clear-glass window brings morning sun and a country view to this corner of the master bedroom. Both walls and ceiling are finished with plaster

Photographs by Billy M. Glenn



FIRST FLOOR



BASEMENT 0 5 10 15 FT.

The entrance stairs, garage, and porch are topped by a bold projecting roof

In Knoxville, Tennessee . . . . . Designed by Alfred Clauss and Jane West Clauss

DESIGN DETERMINANTS

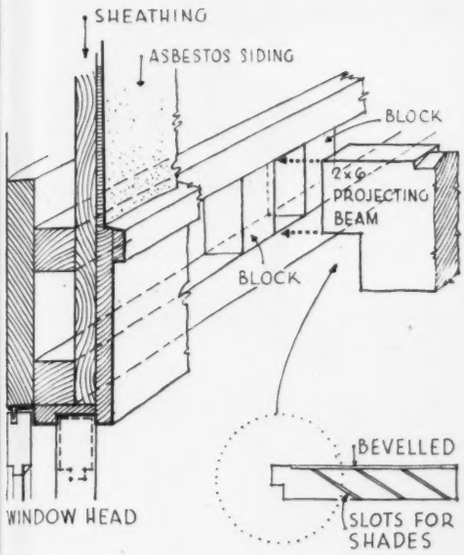
• A prominent hilltop site • Individual and informal living tastes which included • A desire to reduce housekeeping drudgery to a minimum and • To take fullest advantage of broad views of the surrounding countryside • A modest budget

A highly individual house specifically designed to suit the owners' particular tastes and requirements, this small home sits on the crest of a Tennessee hilltop. By raising the main living floor to an upper level, the extraordinary view, which includes three rivers and the distant range of the Great Smoky Mountains, is yet further dramatized.

The meager planting that existed at the time the photographs were made leaves the severely rationalized design rather in need of some softening element. Something of this is contributed by the variety in color and texture which exists in the wood members, masonry, and other wall surfaces. Still, the house does sit *on* rather than *in* its setting. Whatever the success of the design from this point of view, it is provocative to study a house in which the designer has made a sincere attempt to develop an environment for living sensibly in today's terms.

While, objectively, it could be argued that the main entrance might better have been arranged so that it opens less directly into the middle of the living space, the argument is futile in the face of the fact that the owners preferred it as it was planned. Some difficulty was experienced in obtaining a construction loan, the lending agency expressing concern that the house would not sell. It is interesting to learn that when the owner left for the Army and sale became necessary, the house was sold within two days after it was advertised.

Slope of the land suggested placement of the garage at the front, left-hand corner of the house. The architect capitalized on this out-of-line location by constructing



PROJECTING BEAM & FRAMING

The series of projecting 2 by 6 beams above the living room windows have grooves at either side to receive removable slats that serve as sun shades

Large sliding windows line the walls of rooms on the view side

The slope of the site permits garage at grade and good window areas in the downstairs recreation room

South wall of the living room includes a view of three rivers with the Great Smoky Mountains in the distance

DESIGNED BY ALFRED CLAUSS AND JANE WEST CLAUSS

Walls are chestnut surfaced; glazing in partition at left lights the bedroom passage

above it a screened living porch with a bold, rounded overhanging roof. One entire side of the dining space opens up to form a continuous floor area with the porch. The living room wall on the view side contains large, sliding, plate glass windows which, when opened, transform the room into a deep, sheltered living loggia. The opposite partition wall, with panels of glass inset at the top, both screens and lights the passage to the bedrooms.

Below grade, foundation walls are of poured concrete; walls above grade, steps, chimneys, and fireplaces (in both recreation room and living room) are of native stone. The rest of the house is wood-framed, insulated, and surfaced on the outside with large units of asbestos board. Interior walls are of natural chestnut paneling; floors are oak; ceilings are plastered. The house is heated by warm air from an automatically controlled coal-burning furnace which, along with the laundry, storage room, recreation room and garage, is located at the lower level. Tubular lighting installed in ceiling coves is used throughout.

In Claremont, California . . . . . Millard Sheets, Designer
Benjamin H. Anderson, Associated

DESIGN DETERMINANTS

• A magnificent site in the Padua Hills, about 30 miles from Los Angeles • The personal tastes of the artist owner • The needs of a busy family with four children • Willingness to experiment with materials • Love of life in the country

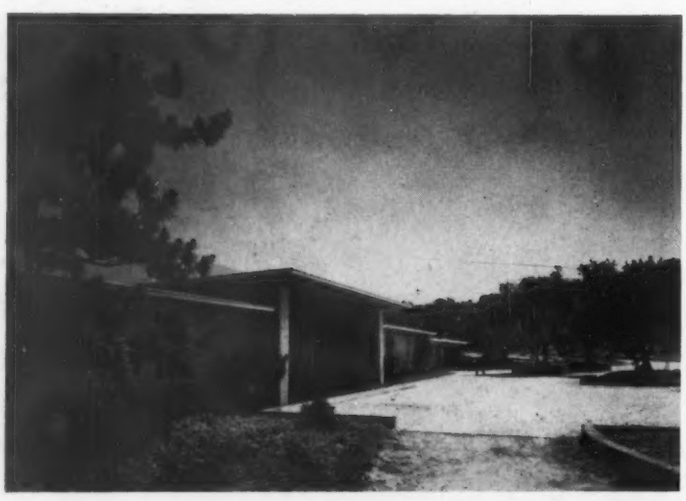
The warm earth tones of the exterior are perfect complements to the dusty green of pepper trees, the deeper foliage of

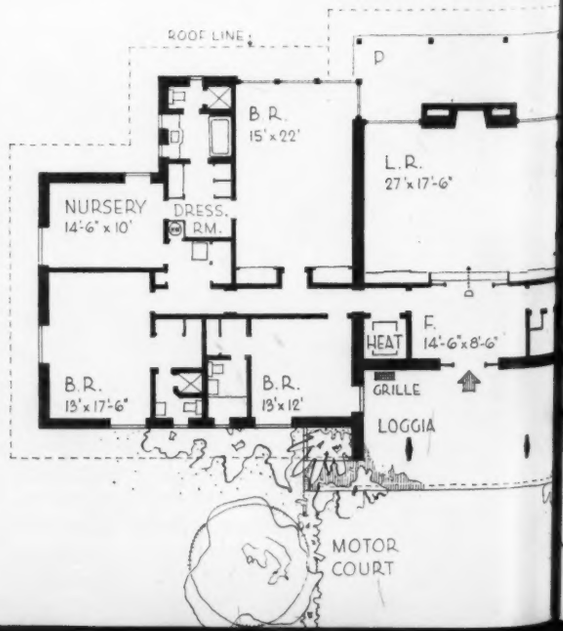
When the well known painter Millard Sheets decided to build a home for his family it is not surprising that it should turn out to be colorful and highly individual. Objectively, it is a strikingly successful alliance between simplicity (in choice of materials) and elegance (in arrangement of spacious rooms and attendant amenities).

We suspect that in these joint characteristics one finds a fairly direct architectural reflection of the owner's personality. As his painting attests, he admires sincerity, simplicity, and directness; he is also a widely traveled and cultured man who knows and enjoys (and can afford) the refinements of existence. Throughout the house, this admirable combination finds architectural expression.

For example, the main entrance is extremely formal, and beyond the front door, directly on axis, is a rich

Entrance front, looking across the motor court

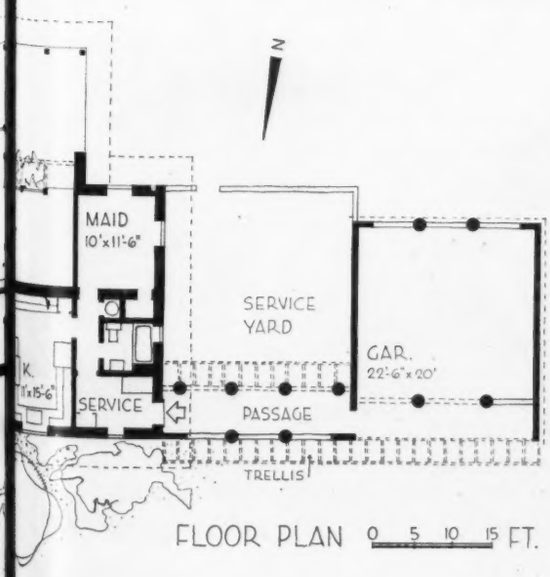




orange trees, and the hazy, cool masses of the surrounding mountain slopes

Photographs by Roger Sturtevant

(though simple) pierced oak screen surrounding the living room doors which, in turn, center on the room's fireplace wall. Then, by contrast, one finds solved in the design of the living room itself one of the most common problems of everyday livability. It is usually assumed that in arranging the main conversational group in a living room, one must choose between organizing it around the fireplace *or* some other major element, such as a view window. The design of the Sheets living room neatly combines the two. The main furniture group is placed around the fireplace, but the flanking window walls allow those enjoying the fire also to look out on the terrace and natural beauty beyond. Furthermore, the large glass areas provide this abundance without the glare that results from walls in which there are several small windows.



FLOOR PLAN 0 5 10 15 FT.

Garden front, with bedroom wing in foreground

The open framing above the dining room and planting recess is clearly shown in this view of the living terrace

Front door, looking through to living room screen

Yet another instance is seen in the luxurious comfort of each bedroom equipped with its own dressing room and bath on the one hand, and on the other, the down-to-earth practicality of the large combined kitchen and breakfast room—a facility that many a housewife with a large family to feed would envy. Obviously, the house was designed for gracious living, but it is also entirely practical, and any appearance of grandeur the photographs may convey is deceptive.

A country site of the sort that only Southern California can offer set the key for the dramatic ceiling-height windows on the garden-view front—great panels of clear glass in both living and dining rooms. Between the two rooms an all-glazed recess is introduced where luxuriant vegetation flourishes—apparently inside the house. Light comes to the dining room and this recess through open construction in the terrace roof bordering the exterior walls of the area.

Floor construction is a 3½-in. reinforced concrete slab laid directly on the ground. In the entry hall, living room, and dining room, the finish surface is of common brick; elsewhere, flooring is of 9-by-9-in. asphalt tile.

Exterior walls are of rammed earth, reinforced with form ties 2 feet on centers both ways; the exterior is finished with cement blown over wire mesh. Interior wall finishes are applied over conventional stud framing. Sash, except in the living and dining rooms, are

MILLARD SHEETS, DESIGNER

BENJAMIN H. ANDERSON, ASSOCIATED

The pierced screen and doors to the entrance hall are of oak

The fireplace and view window center of the living room, showing planting recess and dining room beyond

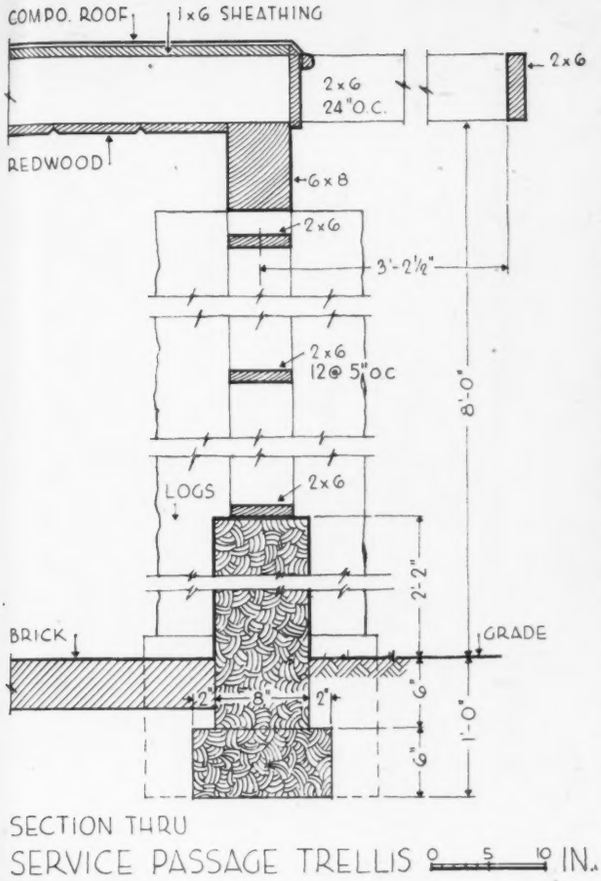
MILLARD SHEETS, DESIGNER
BENJAMIN H. ANDERSON, ASSOCIATED

A single carved wood figure decorates the oak-paneled fireplace breast. The tall flanking windows slide back into pockets within the construction

stock steel casements without muntins. In the main living rooms, the huge windows are of plate glass in special frames.

The house is heated by an oil-fired furnace (located in a closet off the main entrance hall) with a fan and duct system, with underfloor return.

In the large combined kitchen and breakfast room, the two functions are separated by a projecting counter. On the kitchen side, this counter-partition provides additional work and storage space. Finishes were chosen for easy maintenance—waxed, natural oak woodwork; floor of asphalt tile



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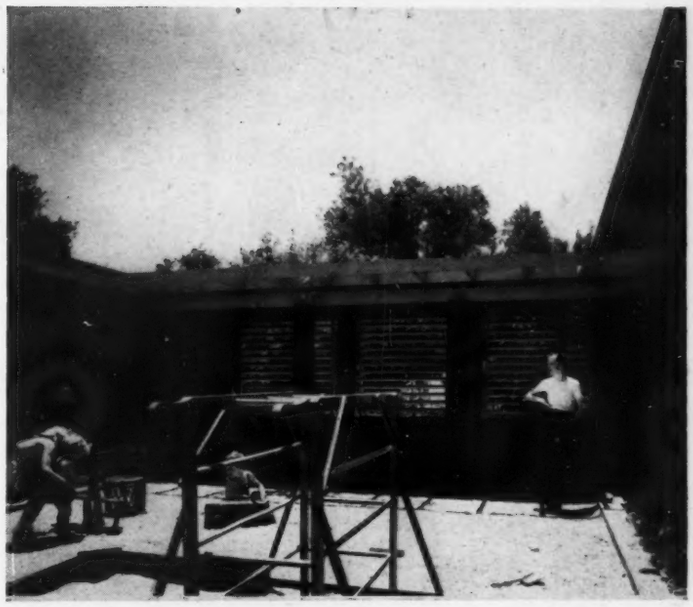


Laundry and Play Yard

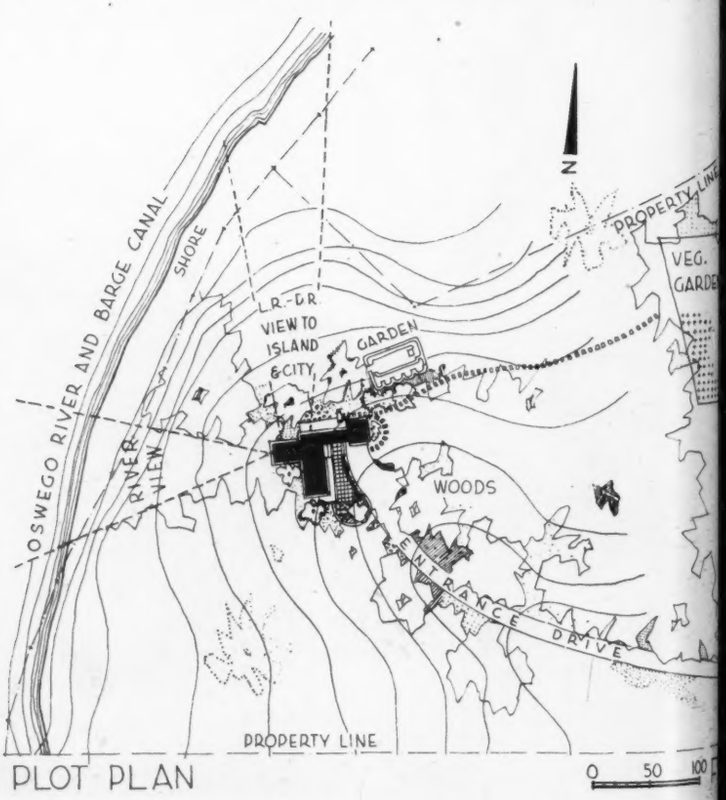
The space between the kitchen end of the house and the garage is enclosed on the sides by a lattice-screen wall. This courtyard serves as both a drying yard, directly accessible from the laundry-service room, and as a protected play space for the children. The design device of a projecting roof trellis forms a continuous joint between the house, play yard, service, and garage.

From the carport-garage past the screened laundry-play yard to the main house entrance

Entrance drive approach; bedroom wing in foreground

Photographs by Robert J. Arnold

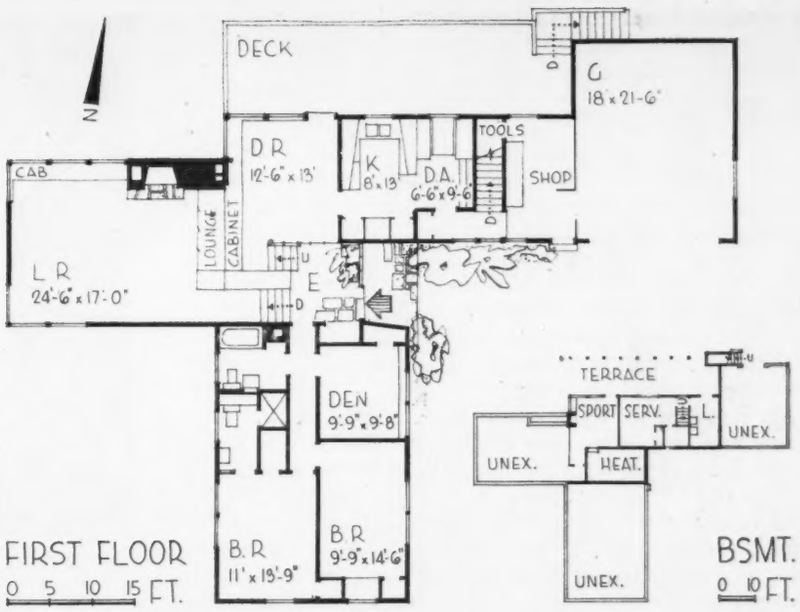
In Fulton, New York . . . . . D. Kenneth Sargent, A.I.A., Architect



PLOT PLAN

DESIGN DETERMINANTS

A heavily wooded, sloping site bordering a river • Living requirements of a bachelor owner • Severe winter climate • Problems surrounding existing grade conditions and orientation



Designed for a bachelor who employs a man and wife as caretaker and housekeeper, this country home is located at the most advantageous spot on property which rises directly from a bend in the Oswego River. The owner wished to maintain the woodland character of the land, yet so place the house that it would encompass

the view side of the house, there are two levels of outdoor living rooms

views of the river. To do this, the house had to be located well back from the public road, and the woods were systematically thinned to gain the desired outlook. Because of heavy snowfall in the area, however, this location presented the additional problem of maintenance of the approach driveway. The answer was to arrange the drive on the most level land available and, starting at the garage-door level, to step the house down the slope toward the river.

This resulted in a scheme with numerous floor levels. Slate flagstone steps lead down from the garage to the front door. From the entrance hall, short flights descend to the big living room and lead up to the dining room and kitchen; the main bedroom wing is located at the entrance-hall level. A full story height below the dining room-kitchen-shop area is another floor, with servants quarters, a heater room, a sport-recreation room; and commodious living terrace. Above the terrace is a broad outside living deck, accessible from both the dining room, and from an outdoor stairway. Landscaping of the property was handled by N. A. Rotunno.

Inside the house, much of the cabinet work, built of birch plywood, serves also as partitioning. The two-level unit that separates the living room and dining room consists of storage cabinets for linen and china at the dining room level, a radio cabinet, a bookshelf, and the frame for the fireside davenport in the living room. The radio loudspeaker opening and heating grill are combined in a unit.

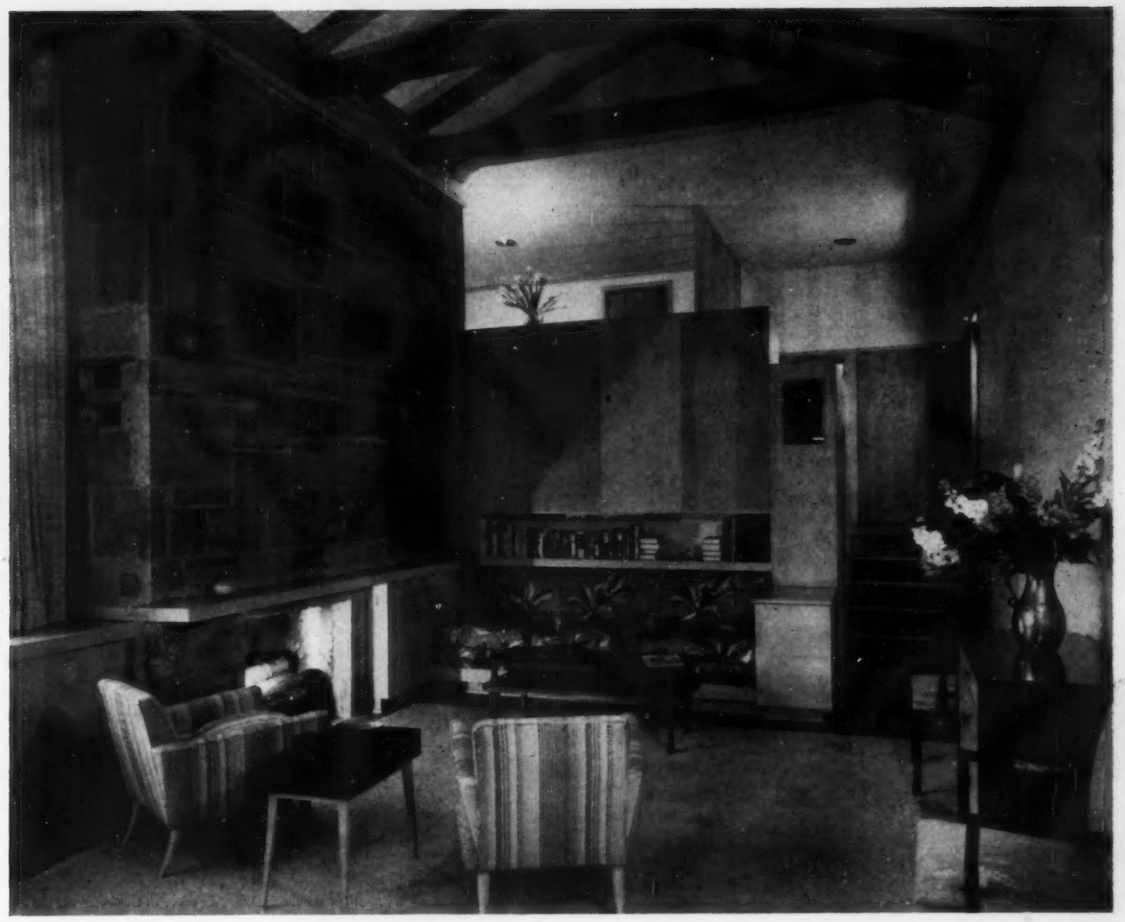
In assaying architectural advance, this house would not be way out in front with the work of experimenter-extremists. But when its locale is considered—a region steeped in reverently admired architectural tradition, where those who seek to chart the course of architectural progress infrequently find cairns—this house is an encouraging trail blazer. It avoids the obvious and asserts there are better, contemporary ways of doing things. True, one feels here and there—in the living room for instance—a vague, lingering nostalgia for the Great Hall, for the massive stone fireplace, the open-timbered ceiling of olden days (and we, for one, find this superficial expression the least convincing thing about the design), but the detailing, the intelligent use of plywood, large windows, and built-in furniture all bear witness to an objective concern for providing human comfort through materials and techniques of today.

Through the entrance door up flagstone steps to the garage

Of both masonry and wood-frame construction, the house has wood exterior surfaces of vertical, matched redwood, natural weathered and oil finished, except for the entrance trim, which is painted yellow. Exterior trim is of pine, weathered to blend with the redwood. The stone is from a local quarry; asphalt shingles are used on the roof.

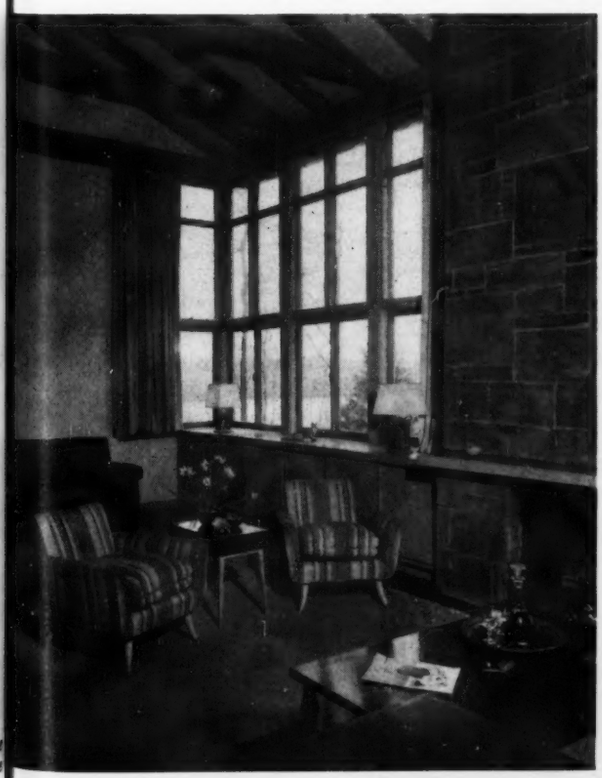
Except in the living room, sash are all of a standard sliding type; in the living room, double-glazed fixed glass is used above sliding units. The house is heated by an oil-fired warm-air furnace and by heat-distributing units built into the fireplace.

Entrance hall looking toward the dining room, a few steps above

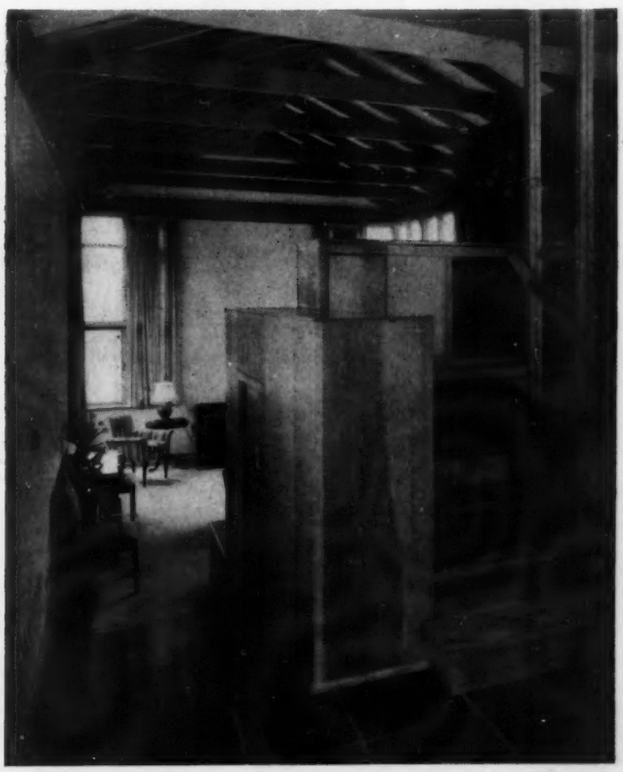


General view of living room showing (at far end) the multipurpose partition and steps up to the entrance hall

arge corner windows are of fixed sash above sliding units



Steps (at right) lead up to the dining room and (straight ahead) down to the living room



Photographs by Esther Born

The owner desired a low-cost, vacation home that would be compact and easy to maintain, yet sufficiently adaptable to accommodate week-end guests. The site is a gently sloping northern hillside in an old orchard, with pleasant views to the north and northeast. Rather violent seasonal changes in the weather, ranging from extreme summer heat to heavy snow in winter, were additional factors in the design.

The solution consists of a large central living space that combines the functions of dining, music studio, and lounging space. Sleeping and service areas are kept to a workable minimum.

The main axis of the living room is north and south, with the tall north window providing both excellent light for music reading and the most advantageous view. Windows at the fireplace end of the room welcome the southern sun. For summer use, there is a terrace on the northeast; another, on the south, is used in winter.

Guest accommodations are located in the bunk-room balcony above the southern end of the living room. The balcony is also used for seating at informal musicals.

The house is of wood-frame construction built on concrete foundations. For economy, structural framing was left exposed wherever possible. Exterior walls are of pine beveled siding painted a warm gray; the trim is neutral white; roof overhangs and exposed frame members are yellow.

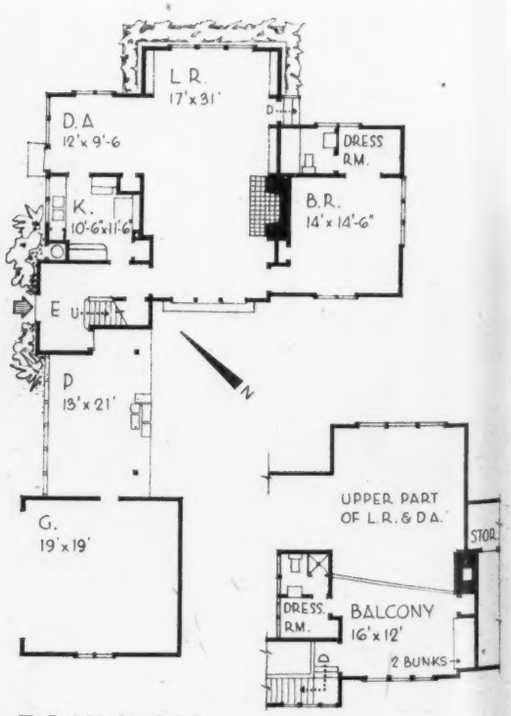
Oiled cedar shingles are used on the roof, and the roof structure is insulated with ½-in. insulation board laid over sheathing exposed on the interior.

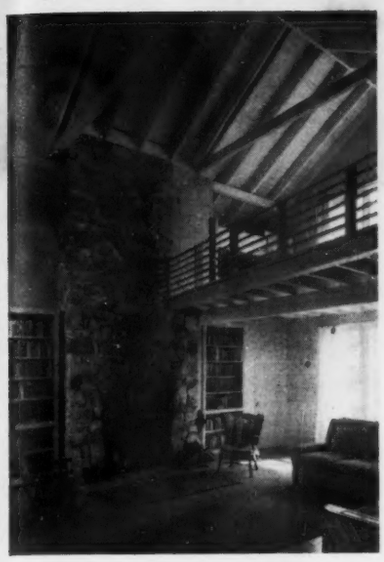
In Dutch Flat, California . . . . . Bolton White, Architect

DESIGN DETERMINANTS

A vacation home for a couple with one college-age son • Owner, a concert musician • Easy maintenance • Week-end entertaining • Year-round occupancy, a possibility

The covered porch adjoining the southern terrace serves as a protected passage to the garage, a shield against prevailing west winds, and a pleasant, shaded outdoor dining room. All sash, trim, and doors were made on the site by local carpenters





Southern end of the living room, with bunk-balcony above

The dining space is an alcove off the main room

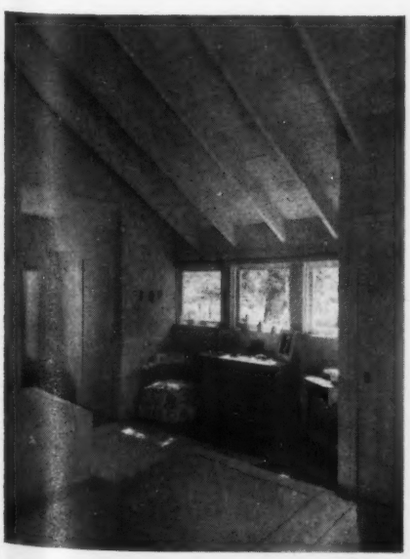
View of north window from the balcony

Interior walls are finished with white pine shiplap, treated with a warm gray glaze that allows the grain to show through

The kitchen and baths are finished in plywood and have linoleum flooring. Kitchen and entry floors are 12-by-12-in. quarry tile; all other floors are surfaced with 6-in. oak planks

The chimney is built of local stone. In the fireplace construction, a patent firebox was included, with heating ducts opening into the living room, the bedroom, and the bath. This, together with a combination wood and gas kitchen range, supplies ample heat for normal use. For extreme weather, however, there is also a gas floor furnace installed under the living room

Bedroom



Photographs by Jean St. T

In Charleston, West Virginia . . . . . Martens and Son, Architect

DESIGN DETERMINANTS

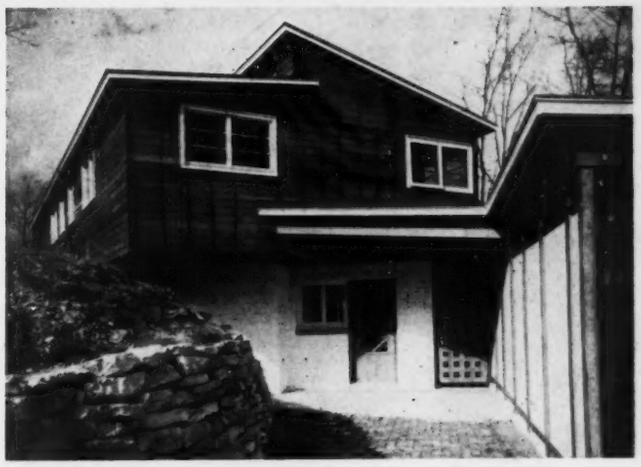
Steep hillside site • Family: father, mother, two children • Owner's hobby; photography • Delight in informal entertaining

Practically precipitous slopes rise from the banks of the Kanawha River in Charleston. While they offer impressive views of the valley, the city, and the hills beyond, they are also a sizable poser to the residential architect. The architects of the house shown here had just such a site to cope with.

Near the top of one of the high hills that offer a panorama of the surrounding countryside, the site is both rugged and irregular. The family—parents and two small children—wanted a home that would not only supply proper facilities for each member but that would make much of the splendid views, simplify the business of entertaining, and provide a well equipped darkroom to serve the owner's hobby of photography. Analysis of the plans shows how well the architects solved the problem.

General organization of window areas provides great openness in all major rooms on the downhill view side. On the upper slope, where there is no view and from which direction stormy weather usually approaches, windows are smaller in area and kept well above the floor for better ventilation. This high location also leaves maximum wall space for furniture placement.

Walter F. Martens, A.I.A.
Robert E. Martens, A.I.A.

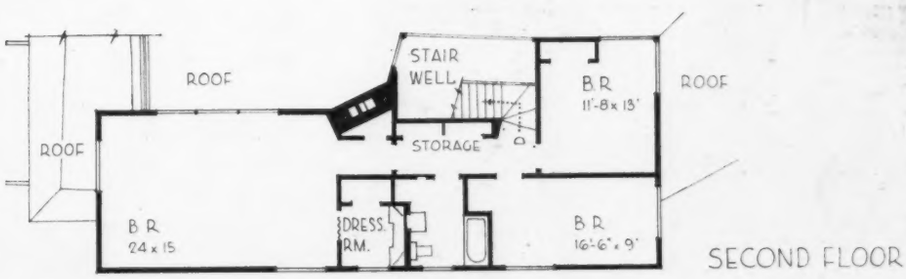


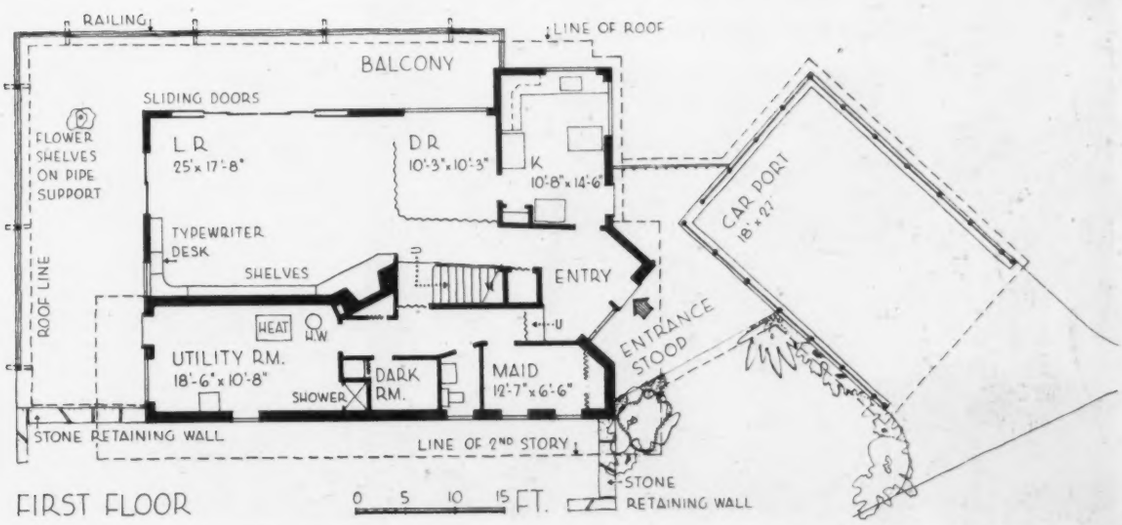
Main entrance, service entrance, and carport are concentrated to open off the main roadway level

The open plan of the first floor—with the dining space separated from the living room and entrance by only a curtain (when drawn)—was specifically planned to make entertaining as simple as possible. Sliding glazed doors open this general area out to the cantilevered balcony, in effect forming a single, large indoor-outdoor room that is equally accessible for entry, departure, and service.

In a house that is basically so simply schemed, the objective analyst cannot but wonder about the position of the living room fireplace. The angular arrangement, alongside the area that would normally be used for entrance and exit, seems something of an anachronism. Close furniture placement would block the direct line of traffic; more distant placement would appear to impair the purpose of a fireplace.

The carport, front door, and service entrance are sensibly located at the end where no particular view exists

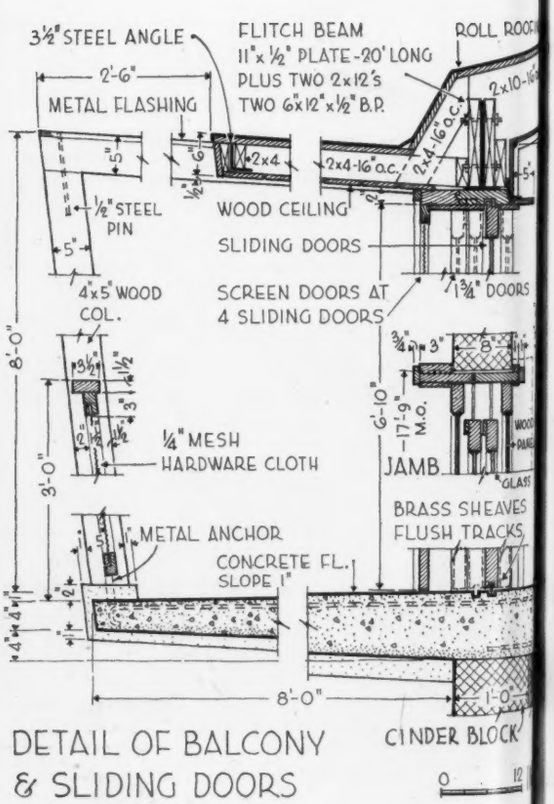




Cinder block below; wood frame above: organization of masses and cantilever deck suggests a direct solution to a problem in physics

MARTENS AND SON, ARCHITECTS

Below the cantilevered balcony is a sheltered play terrace



DETAIL OF BALCONY & SLIDING DOORS

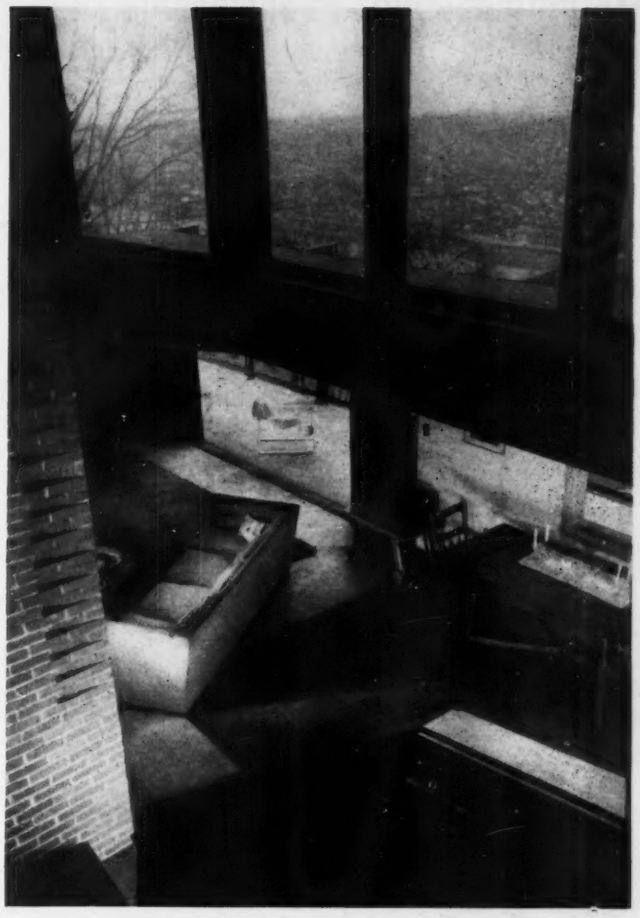
and which is also the brief point where the adjacent public road is at lot level.

Because of site contour, a basement was inadvisable, and the utility room serves as heater room for the gas-fired warm-air furnace as well as for a laundry, with direct access outdoors. The darkroom alongside is fully equipped to cater to the owner's serious interest in camera work. A further provision in this line is the photographic display panel, beside the fireplace in the living room, for exhibit of photographic enlargements.

Roof lines are so sloped that practically no metal gutters and conductors were required. The house is built on cinder block foundations with the same material used for exterior walls of the first story and the center bearing wall; exterior surfaces are cement finished. The second story is of standard studding and sheathing, with redwood exterior siding finished in oil and light creosote stain. Insulation is installed between the studs. Exterior trim, doors, sash, and frames are light ivory.

No interior plaster was used; masonry units are painted with casein paint; stud walls and partitions are faced with natural finish $\frac{3}{8}$-in. Philippine mahogany plywood nailed flush with V-groove joints. Ceilings are covered with $\frac{1}{2}$-in. insulating board painted ivory. Interior trim is natural finished redwood.

The first-story floor is a waterproofed and paneled reinforced concrete slab, continued in a cantilever to form the living room balcony. Large carpets are used in the living room. Second-story floors of main rooms are of stained white oak; in the bath, linoleum is the floor covering. All windows, except in the service area, are wood sliding sash. Roofing is roll-type prepared roofing.



Looking down into the living room from the stair landing

From left to right: dining area, entrance passage, stairway, and living room fireplace

In Philadelphia, Pennsylvania . . . . . George Daub and Associates, Designers

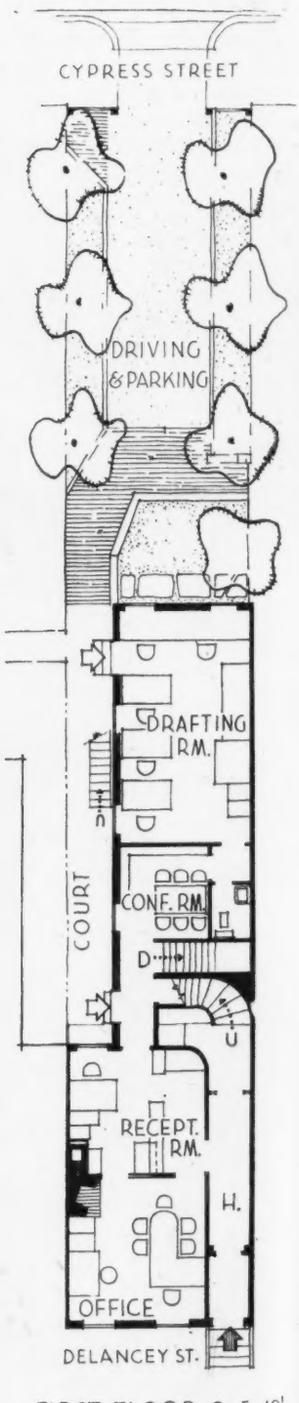
DESIGN DETERMINANTS

The needs of the architect for his own office and home ● an 1850 original, with higher floors at the front than at the rear ● Desire for more sun and a touch of nature

The architect discovered a fine 1850 house on an exceptional city lot that extends the full depth between two streets. The front of the house was three stories in height; the rear, four. Furthermore, story heights of the front portion were greater than those in the rear. Inevitably this led to floor plans with different levels—a situation which the architect turned to advantage. By devoting the entire first floor to his professional activities, easily accessible from the street, he was able to make use of the levels above in such a way as to keep stair climbing to a minimum. From the living room level, the dining room-kitchen floor is but a half flight down, and the master-bedroom wing is a half flight up. The other two bedrooms are another half flight

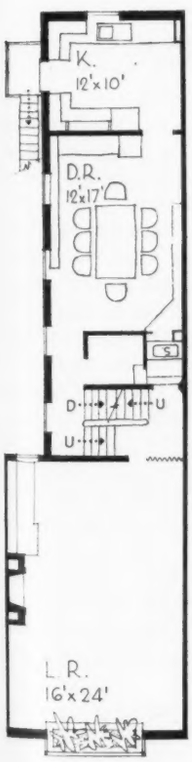
White marble surfaces the lower floor; corrugated asbestos, the base of the living room bay

Photographs by Gottscho-Schleisner

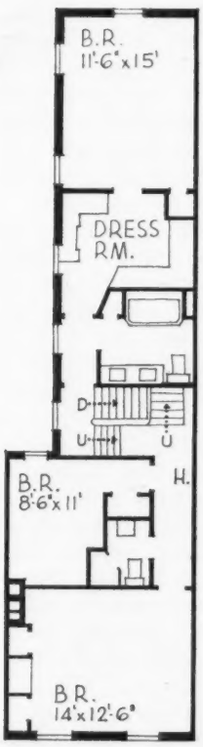


FIRST FLOOR 0 5 10'

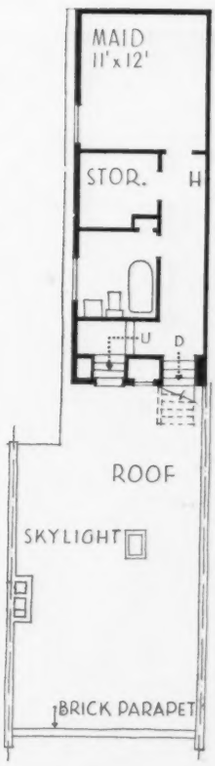
The wide planting bay enlivens and brightens the living room



2ND FLOOR



3RD FLOOR



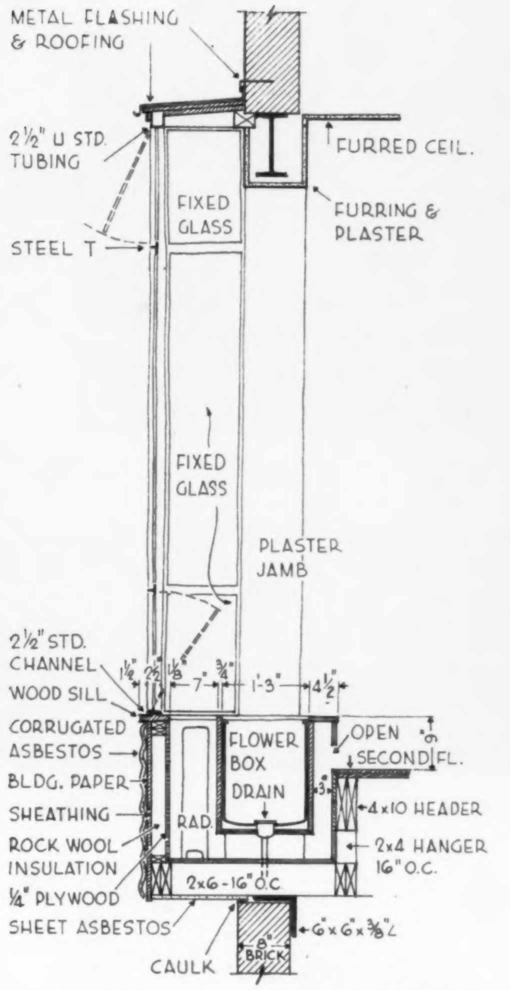
4TH FLOOR

Using all seven levels of the old house, the architect worked out an efficient plan for his own home and offices. In most cases, no more than one half flight separates immediately related functions

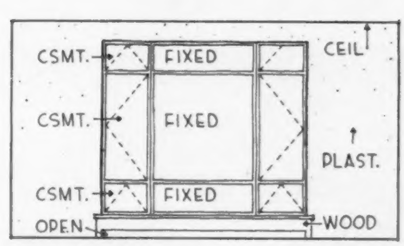
Neutral white walls, walnut paneling, golden-rod yellow sofa, gold pleated paper lampshade, cattail brown carpet
Work desk and bookshelves in the rear corner of the living room

above the master bedroom level, and servants quarters occupy the rear half floor directly over the master suite. Another fortuitous factor was that at the rear, where the house is narrow and windows occur at the side, the house on the adjoining property is also stepped back, creating a double-width courtyard that admits more light to central rooms than most city row houses enjoy. A particular feature of the remodeling was removal of the two front second-floor windows and substitution of a broad planting bay. This was worked out, as Mr. Daub puts it, "to introduce some growing interest in the room and to add enough natural humidity to the atmosphere to compensate for the dryness in the winter months." Actually, it does considerably more than that. It brings added light and sun to the room; it transforms the conventional, orderly, but uncompromising formality of the original 19th Century facade to an equally orderly scheme that reflects the more open, informal ways of today. The design also eliminates a useless cornice and substitutes a brick parapet that serves as a protecting wall for the roof deck. In developing this sensible contemporary scheme within the framework of an old structure, we feel that Mr. Daub deserves commendation for his consideration of the basic character of the neighborhood.

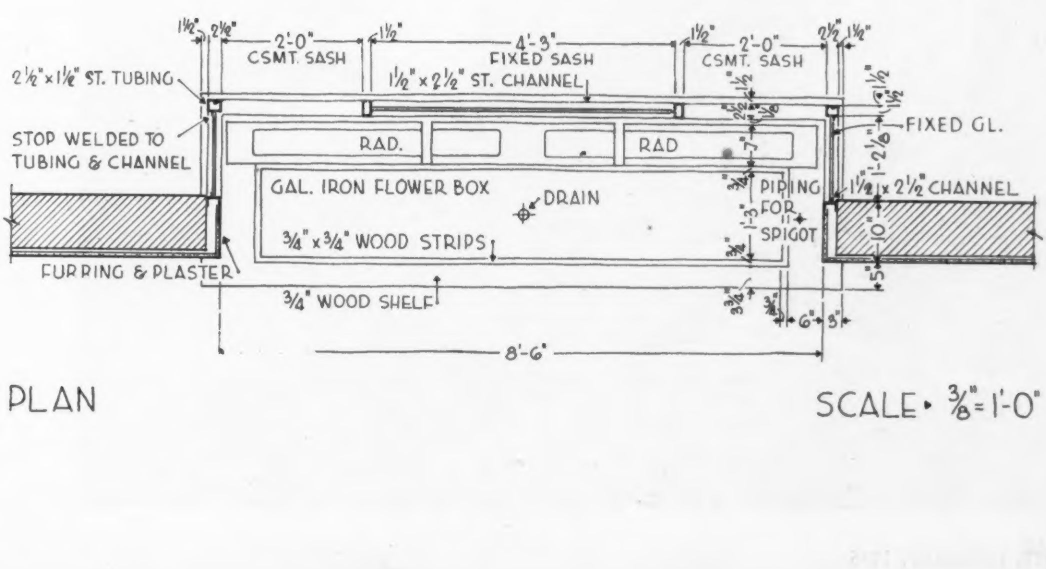
Interior arrangement of space seems likewise to have been made from the point of view of providing what was wanted rather than what might be "expected." In the architect's offices, lined in a functional layout, the conference room appears somewhat cramped, but this is due to space limitations, rather than a fault in design.



SECTION SCALE • 3/8" = 1'-0"



INTERIOR ELEV. 1/8" = 1'-0"



PLAN SCALE • 3/8" = 1'-0"

Dining room side of through-wall, multipurpose cabinet

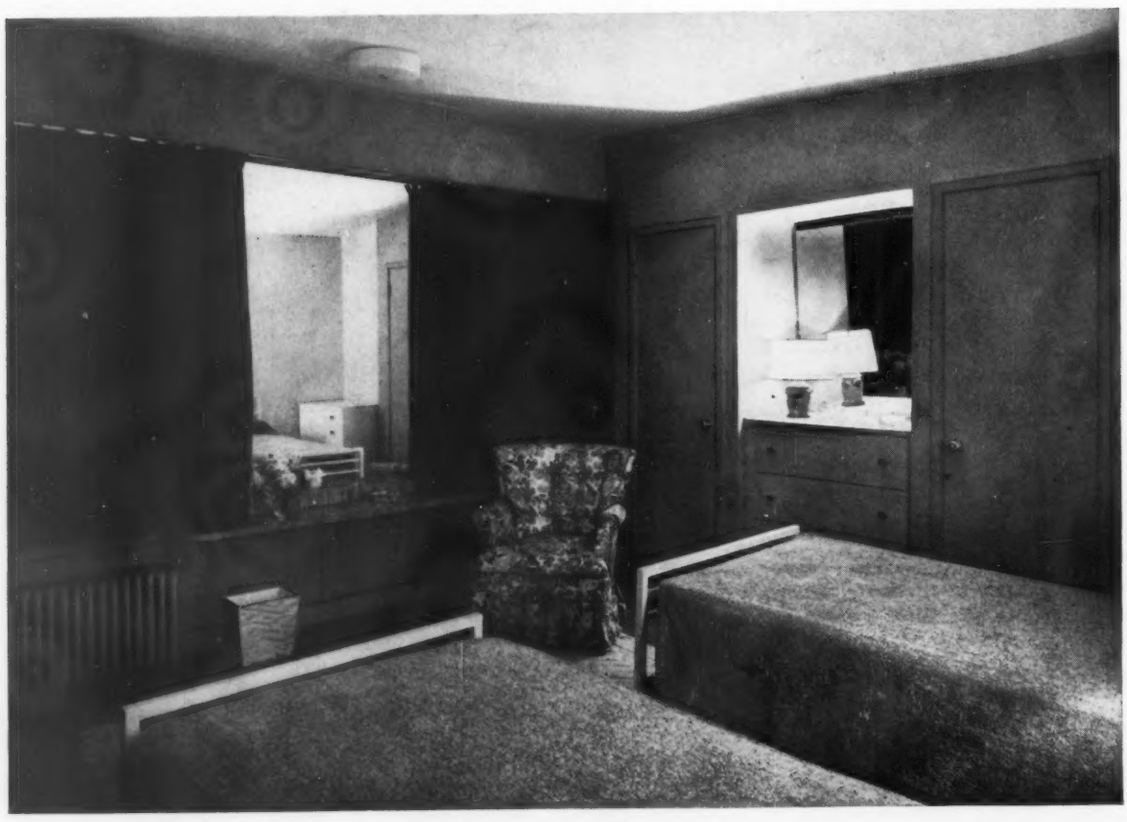
Dining room woodwork is zebra veneer

GEORGE DAUB AND ASSOCIATES, DESIGNERS

Beside the living room fireplace, there is a specially designed sofa, constructed at an angle. This not only brings it into pleasing relation to the hearth but widens the approach to the well ordered desk and bookcase unit in the rear corner of the room.

Between the hall and dining room is a through-wall cabinet, with doors opening into each room. The unit includes a small bar, storage shelves, a sink (used for both bar serving and for flower arranging), and built-in radio with speaker outlet into the dining room.

Bedroom at the front of the third floor



Photographs by Jean St. Thomas

The generous living porch, used the year round, is the pivotal element of the first-floor plan

In Dallas, Texas . . . . . Howard R. Meyer, A.I.A., Architect

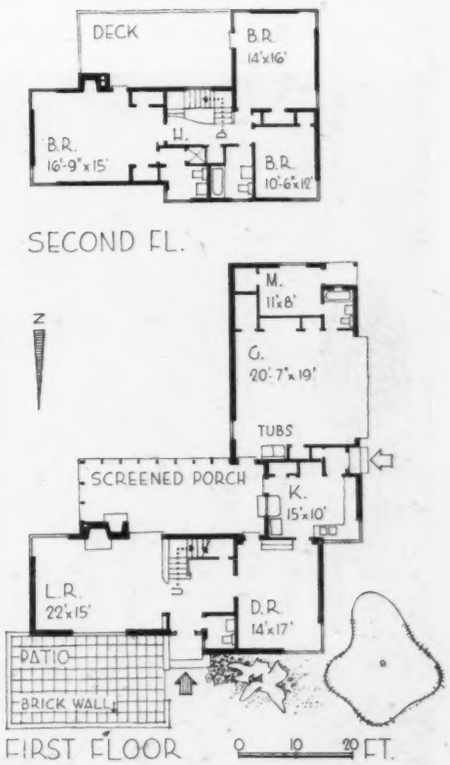
DESIGN DETERMINANTS

A young-in-spirit couple with three married children ● A year-round living porch, a "must" ● Large corner city lot with fine elm trees

The clients, a couple in their early sixties, wished not only a comfortable home for themselves but a place large enough to accommodate frequent visits from their three married children and their six grandchildren. Both are also hobbyists—she, a collector of china and costume dolls; he, an amateur woodworker. In addition, they are enthusiastic gardeners.

The site is a corner lot 75 by 145 feet with the streets on the north and west—the two less desirable exposures. The adopted scheme for the house, an L-shape with the legs of the L bordering the streets, provides privacy and protection for the garden and living porch on the southeast.

The living porch—for use in both summer and winter—was one of the most important "musts" in the owners' list of requirements. In the first-floor plan, the architect has made it the pivotal element—directly accessible from the living room, dining room, kitchen, and garage. Used for both living and dining, it is equipped with its own fireplace and a ceiling fan to stir the air on sultry evenings. Although it is also used for circulation—



The garage wing (left) and house proper shield the living porch and garden from street view and noise. Construction is of wood frame, built on reinforced concrete piers and grade beams. Brick veneer surfaces the ground floor. Above, V-joint redwood shiplap is used. The roofing is black slate

The living porch. During the winter, the porch is enclosed with glazed panels that in summer are stored in special closets in the garage

Fireplace wall of living room paneled in plywood

from garage to house, for instance——it is so placed that traffic is restricted to one end.

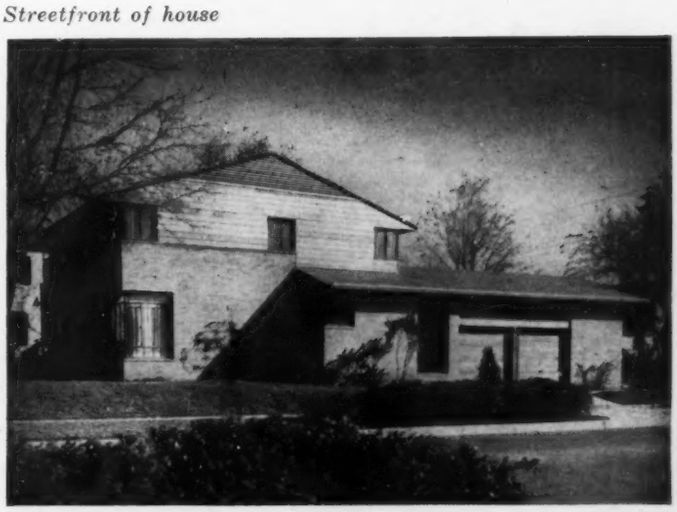
In general aspect, the owners wanted a house of contemporary design, but also one in which they might use their old furniture without unhappy results. On the interior, this seems to have worked out well from all points of view. On the exterior, it appears that the attempt to reach a stylistic compromise resulted in a somewhat dated modernism of the period when a corner window was a novelty. There can be no quarrel with the corner-window device when it achieves a specific goal, and it may be that in this house there is good logic behind all nine of them; but a superficial impression suggests that the "motif" has been employed as a repeating design element rather than as a clear solution to living needs.

Interior walls are plastered with light-stained pine trim; doors are birch or pine plywood slab-type units; floors are of red oak. The porch flooring is 12-in.-square split hollow wall tile. Details of the main stairway are shown on Page 83.

Heating is done by individual units—gas floor furnace for the main rooms; electric wall heaters in the bathrooms.

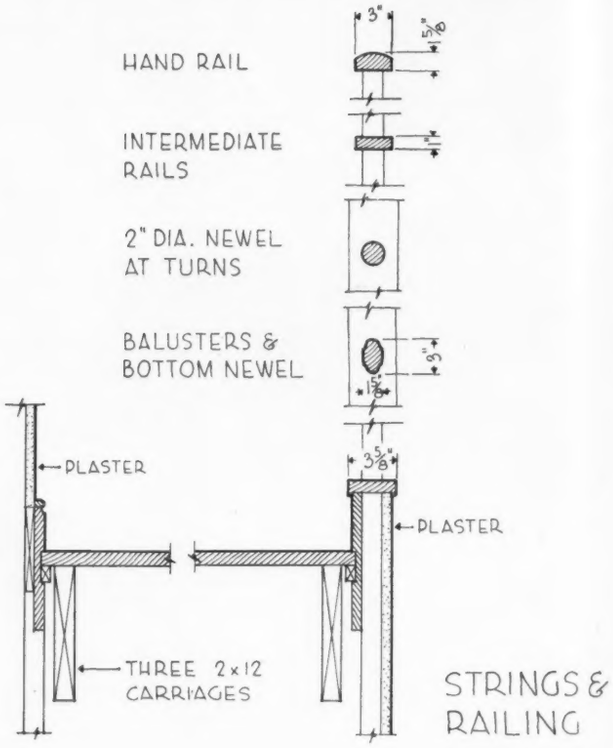
Garage and service wing

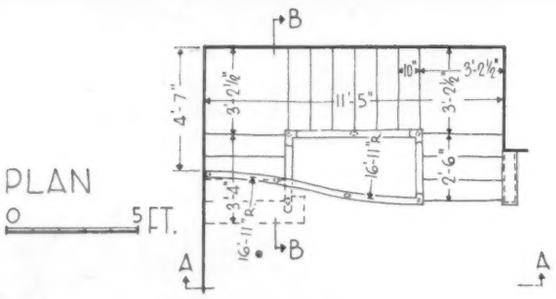
Streetfront of house

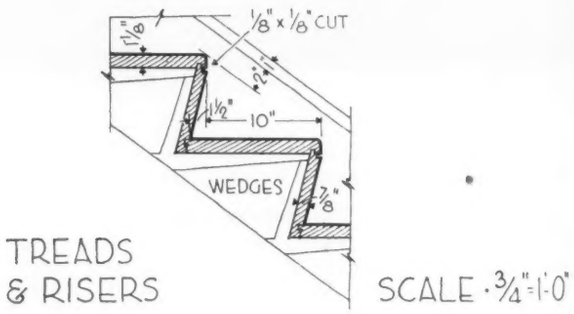


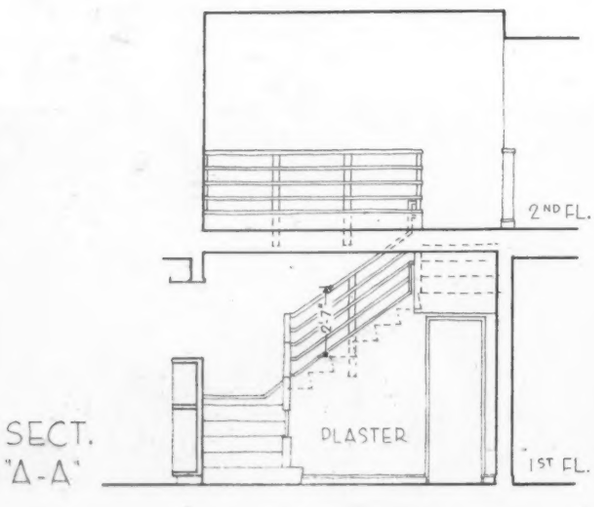
Stair Rail

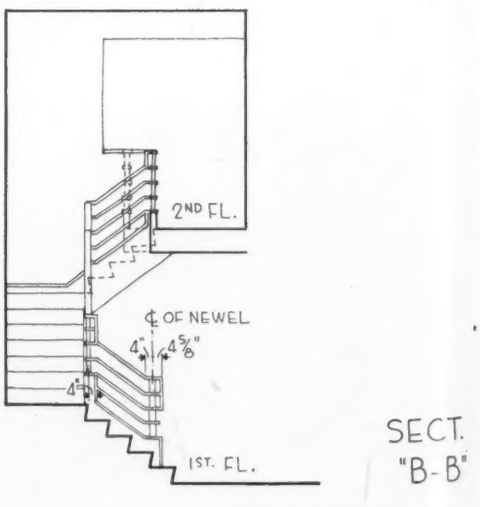
. . . . . Howard R. Meyer, A. I. A., Architect











The fluorescent principle was used in a lamp, in 1896, by Thomas Edison, but it did not become a commercially practical source of illumination until shortly before World War II. Seldom has it been successfully used in house design, particularly in houses of moderate cost, yet its potentialities are great. The following article was prepared with the assistance of lighting engineers.

FLUORESCENT LIGHTING for HOUSES

by FRANK G. LOPEZ

Fluorescent lighting has been generally available for only a few years. Much of that time we have been at war; as one result of this unnatural state, industrial applications of the new medium are now commonplace. This is logical considering that it offers, for such applications, relatively high light output combined with relatively low current consumption, and that its low surface-brightness makes possible the use of simplified fixtures in which critical metals are almost non-existent.

Also, due to certain characteristics—probably, in part, to its novelty as well—fluorescent lighting had made great headway in commercial fields in the few short years before the war. But what about residential work? There it has never been used very freely; but now, with every promise of a boom in house construction as soon as times permit, we are hearing something about fluorescent lighting for the home. Can it be successfully used there? Yes. However, if it is an improved light source for some purposes, it is also more complicated, though not at all difficult

Photo by George Van Anda

In this early application the ceiling fixtures, simple in design, are placed over the spot most natural for furniture grouping: before the fireplace. (Vahan Hagopian, architect.) The surface-mounted fixtures allow light to "spill" out the sides so that part of the ceiling is illuminated; there is little glaring contrast between the light source and the ceiling surface. Fluorescent lamps produce a diffuse light in comparison to the incandescent's "point" source, yet even though the lamp thus has a lower surface brightness, it is preferably not used bare. Some later types of fixtures incorporate directional reflectors.

Photo by Ezra Stoller

The bare fluorescent lamp used as a ceiling fixture in this house by Carl Koch is probably, esthetically speaking, a better piece of design than the average commercially available fixture. However, it might prove to be unsatisfactory unless the ceiling is so perfect a reflector that the line of light merges into its background without causing glare. Note the local light over the pass-window to the dining room, at left of photograph.

to employ properly. In order to design well with it, and to provide for it properly, its characteristics must be explored.

Natural vs. Artificial Light

We've all heard the common statements about natural light. North light is shadowless; the quantity of light, even in the shade of an apple tree, on a sunny summer afternoon is far too great for any artificial means to approach in intensity, and so on. We have heard that colors can be matched accurately only in daylight. We know these things—but do we? There is truth in them, but they are also misleading.

For instance, north light is not always shadowless; not if a reflecting surface mirrors the light without further diffusing it. The light level under the apple tree is high, but it is also glareless unless it is directly contrasted with the sun, the brilliant sky, or some other strongly reflective surface. As for matching colors—well, how does a woman apply make-up? The knowing one uses color more freely, in brighter shades, for evening wear than she does for daytime; she applies it under artificial light when she is going to be seen under artificial light.

Sun light is light produced by combustion, and so has a warm color, rich in reds and yellows. That might be called its "natural" state; the degree of clarity of the sky affects its color. Seen from the highest window in a city skyscraper, it has been filtered through smoke, dust, and mist, which again change its color. Closer to the street level, the color of sunlight is yet again altered; at the seashore it is one thing; in the green country it is still another. All these are obvious facts. They are repeated to emphasize the point that the quality of light, in a very real sense, depends upon its color; it is almost true that light *is* color. (Color, of course, is visible only as certain rays of light are reflected, others absorbed, by the object viewed.)

One of the attributes of the contemporary house, in which much of the wall area is glass, is the penetration to its interior of great quantities of diffused natural light. While artificial lighting cannot hope to equal the natural in quantity, it can in purpose and to an extent in quality if we wish. That is, we can suffuse the interior of a house with artificial light. That could be done with incandescent lamps; it can be done better, probably, with fluorescent; but will the result prove acceptable? We are accustomed to certain things in our artificial lighting, and much as we find some types of lighting desirable in factories for efficiency's and safety's sakes, we have not yet accepted them for use in the home.

What Light Are We Used To?

Until the advent of fluorescent lighting all the artificial light commonly used in houses was the product of combustion; that is, of heat. So is sunlight. The fact doesn't mean much to us. What does it matter as long as we *do* have artificial light? Just this: We have been conditioned for centuries to expect a certain color in our artificial light. From simple firelight through the wick dipped in tallow, whale oil, or kerosene, through the candle and the gas mantle, even through the "incandescent" lamp, the actual heating of the wood, wick, mantle, or filament produced the light, a warm, yellowish-reddish light.

Habit thus leads us to expect all artificial light to be warm, warmer than natural light. We buy rugs, draperies, upholstered furniture, evening clothes with that in mind, unconsciously, perhaps; we paint or paper the interiors of our houses with that in mind.

Fluorescent light is produced by the reaction of certain fluorescent materials (called *phosphors*) in the presence of an electrical discharge. Fluorescent light is never an intense red unless a filtering medium is added. The fluorescent lamp generates little radiant heat compared to the incandescent. The color of fluorescent light, depending upon what phosphors, or combinations of them, are used, may be blue, blue-white, green, yellow-white, or pinkish—to repeat, never deep red.

If light is color—or color, light—do you understand what happens when a fluorescent source supplants an incandescent? Suppose a wall to be covered with green paper of a certain hue. It may be fairly bright under natural light, which always retains sufficient warmth of color to affect the green wallpaper. Under the quite warm incandescent light the green

would be even more subdued. But under fluorescent, particularly in certain colors, the green paper would be disturbingly vibrant, or at least more brilliant.

Research has been under way for some time, to a greater or less degree as war exigencies have permitted, on phosphors to generate a reddish light. They may some day be found; meanwhile, by using special glass for the lamp tubing or employing actual pigments it is possible to add some reddish tone to fluorescent light.

The wallpaper example should not be regarded as condemning the use of fluorescent lighting in houses. The reaction noted will occur only when the wallpaper color approximates the peculiar yellow-green which is strongest in the fluorescent spectrum; other greens can be used with entire satisfaction. On the other hand, color can now be used in home décor exactly as it comes from the light source, without color-filters (which always decrease the source's efficiency), but in other respects just as stage designers have used colored light ever since the development of modern theater lighting equipment. It can be made to enhance a mood, point up a composition, make a room restful or joyous, feminine or masculine. In this field our home lighting experts have almost no experience. They can tell us *how much* light is necessary for reading, sewing, cooking, and kindred household activities, but the artist will have to fit the *kind* and *color* of light to its purpose. This is being corrected.

Just What Is Fluorescent Light?

The tubular fluorescent lamp is familiar by now, although if we are to believe manufacturers it will take on strange guises postwar. But even an outline comparison will show that the fluorescent lamp is enormously more complex than the incandescent. Briefly, in an incandescent lamp current passes through a resistance, or filament, which "incandesces," producing heat and light.

In the fluorescent lamp, to put it un-academically, the current is carried by a gas, not a wire. Electrons are discharged by a cathode at one end of the lamp, and in the course of their travels to the anode at the other end they cause radiations. Of these a few are visible as light, but the majority are invisible ultraviolet and produce light by exciting the phosphor with which the inside of the tube is coated. A very small portion

The inexpensive house shown at the left, Francis Joseph McCarthy, architect, has the contemporary wall of glass which admits floods of light in daytime. For night lighting only portable incandescent lamps are provided. The paradox seems illogical; but cost was extremely important and fixtures, wiring, etc., to provide comparable artificial light just could not be obtained within the budget. This is one difficulty as far as low-cost residential design is concerned.

On the other hand, tailor-made fluorescent installations such as that in the Executives' Dining Room, United Carbon Building, right, (Martens and Son, Architects) are possible in infinite variation.

Photo by Roger Sturtevant

Photo by Jean St. Thomas

Photo by George Van Anda

In this study, designed by Vahan Hagopian, A.I.A., a fluorescent trough over the window delivers light directly to the desk beneath, at approximately the same angle as daylight entering through the window. Seldom is such close approximation of natural by artificial light achieved.

The dining alcove below, in a San Francisco house designed by William Wilson Wurster for an interior lot, has no window. The skylight functions during the day and is illuminated with incandescent lamps at night. Although the area of the diffuse light source is large, notice the contrast between it and the surrounding ceiling. Projecting the bottom of the skylight below the ceiling surface and using translucent material for the vertical sides would have eliminated this difficulty.

Photo by Roger Sturtevant

(in comparison with incandescent lamps) of the radiant energy becomes perceptible as heat. There are a cathode and an anode at each end of the lamp tube; on alternating current the cathodes at either end alternate in originating the flow of electrons. Hot materials generate electrons more successfully at lower voltages than cold, so in the most common type of fluorescent lamp part of the starting current is used, by an automatic device, to preheat the cathode. This is the so-called *hot cathode* lamp.

High voltage can also be used to start the discharge; since this method destroys the ordinary cathode fairly soon, a special resistant metal forms the cathode in this type, which is called *cold cathode.*

Preheating formerly took some small amount of time; now there has been developed the *instant-start* lamp, which reduces starting time to considerably less than a second. The fluorescent lamp requires a constant current, and to insure proper input, as well as accomplish other results, each lamp must have a *ballast* (in simple terms, a choke coil) to regulate current flow. Ballasts have been developed to work with paired lamps.

These are some of the differences, the visible, easily comprehended ones, between fluorescent and incandescent lamps. There are many others, including the necessity for precise manufacturing conditions.

Types of Fluorescent Lamps Available

At present few types of fluorescent lamps, even in comparison with the number on the prewar market, are commercially available. The war has stimulated development, for military purposes, of many more types, and manufacturers have perfected in their laboratories several new types which have little military significance and so cannot be put into production yet.

When peace comes we will be able to buy hot cathode fluorescent lamps ranging in size from a few inches long and a fraction of an inch in diameter to 96 inches in length and an inch in diameter; or to the standard industrial 100-watt size which is greater in diameter. The small lamps are tiny enough to be used at present for airplane instrument lights; the long, thin ones, called *Slimline*, are laboratory developments, practical, but not in commercial production. These will come 42, 64, 72, and 96 inches in (nominal) length, the first two ¾-inch in diameter, the latter two, 1 inch. Slimline lamps will be instant starting and will probably be considerably more efficient than the standard fluorescent lamp. They can be operated either singly or in multiple with ballast, or in series circuits (like old-fashioned Christmas tree lights) with a high-voltage transformer. Most important, as far as technical data are concerned, Slimline lamps can be operated at more than one wattage and current value. This is not true of standard fluorescents.

Another postwar development which is being advertised is the *Circline* lamp—a fluorescent lamp formed into a circle, which is to be available in three over-all diameters, 8½, 12¼, and 16 inches. It seems as if this were an attempt to produce a fluorescent lamp of shape suitable for manufacturers of conventional portable lamps. If this is the case, it's rather like putting the cart before the horse. More logical would be design of portable lamps suited to the most simple, efficient, inexpensive fluorescent lamp—and the straight tube appears to be at least more inexpensive to manufacture.

It will be possible, of course, to obtain special fluorescent lamps in curved, spiral, and other shapes if cost is no object; but these, having no steady market, will have to be made to order.

Cold cathode lighting is nothing new; it has been used by sign makers for some time. To date it has been tailor made to individual job specifications, and it seems likely to continue in that category for some time. It can be used perhaps most successfully in series, although the lamps can also be installed in parallel. The chief difficulty in using cold cathode lamps lies in the necessity for large wire sizes, adequate insulation, and safety precautions due to the high voltage required for operation.

No type of lamp is any better than its fixture. While the brightness of the surface of a fluorescent lamp tube is considerably lower than that of an incandescent lamp bulb, it can still cause glare if it is improperly

used. Reflectors which help to diffuse the light, diffusing media of glass, plastics, or other material, and above all, design of the lighting to avoid unnecessary brightness contrasts, are means of combating glare.

Lighting and House Design

The glass wall of a contemporary house, because it is a large daylight source, does not cause the glare which develops when a small window pierces an otherwise dark wall. By admitting more light, by giving the inhabitants' eyes distant horizons for an occasional restful glance, and by eliminating glare, the glass wall does its share of improving our physical environment. But this is daytime design only, unless the house has artificial lighting designed to achieve the same purpose by night.

To achieve it, some measure of general illumination is necessary, so that the ratio between the brightness of the object viewed and of its surroundings is not greater than 10 to 1. Spotty lighting, such as that produced by using only the common types of portable lamps in a living room, may produce brightness contrasts as high as 100 to 1. The incandescent lamp by its very nature produces this effect when unwisely used. It is, however, an ideal source for building up high intensities of light in small areas to care for exacting visual tasks. It can, it is true, be used in great numbers for cove lighting or some similar means of producing low-level general illumination; but how much simpler it is to use a tubular light source for this purpose! Slimline tubes were developed to fill needs of this type.

Use of fluorescent lamps will probably entail many changes in our conceptions of how lighting fixtures should look. The traditional fixture was designed for a point source of light—kerosene lamp, gas flame, or incandescent lamp. Fluorescent lamps provide a line of light; the fixture will have to change in design. Perhaps it will become a true *lighting unit*, to be selected on the basis of its efficiency and comfort as a light source rather than its ornamentation!

Built-in lighting is fairly expensive for the low-cost house; in addition, built-in ceiling lighting, particularly if the lens or diffusing medium is flush with the ceiling, creates bright pools of light without relieving the ceiling's darkness—thus creating the very type of contrast which it would seem desirable to avoid. A ceiling lighting unit, therefore, would seem to be better if mounted on the surface and so designed that light spills through its sides to illuminate a ceiling area appreciably larger than the unit itself.

Built-in lighting for built-in furniture, however, seems a natural combination. Here the light source can be completely concealed, and used to illuminate bookshelves, kitchen cupboards, counter tops, desks, cabinets, closets, and so on.

The effect of light on color and vice versa has been discussed previously. There are other ways in which use of fluorescent lighting may affect house design. In large factory installations the heat emitted by incandescent lamps has created a substantial cooling load for air conditioning systems. Use of fluorescent lighting has appreciably reduced these loads; but in house design, so few lamps are used that the change is not likely to be perceptible. However, in small enclosed spaces, if these are brightly lighted, the difference might be readily felt.

As to wiring, we have already spoken of the heavier wire and other precautions necessary if cold cathode lighting is employed. Other than this, wiring for fluorescent lighting is no different than conventional house wiring. There are some precautions to be taken. Occasionally a radio may receive interference from a nearby fluorescent lamp. With the modern, shielded radio this should amount to little; but it is just as well to separate the radio aerial and the fluorescent lamp if this is practical. Eight to ten feet should be ample.

Then, too, frequent turning on and off decreases the life of fluorescent lamps because each start destroys a minute portion of the cathode. It was believed that the converse was true, and experience in war plants which operate on 2 and 3 shifts daily has confirmed the belief. A 20-watt fluorescent lamp, rated at a life of 2500 hours if burned only 3 hours each time it is started, is now rated at 6000 hours if it "burns" 12 hours at a time! Moreover, all fluorescent lamps depreciate in light output continuously throughout their life. The same 20-watt lamp, at

Photo by Ezra Stoller

Fluorescent lamps can be used to provide both directional and general lighting, as in this louvered built-in ceiling fixture over a buffet (Carl Koch, architect). Louvers consist of long thin slats of wood and cut off direct light rays which might be disturbing to diners at the nearby table. At the same time, a high spot of light is created for compositional effect, and the full-wall mirror, adjacent to a large window (see photo below), picks up the reflected light to make it useful for general illumination. This carefully studied residential detail, however, could only be used in a fairly expensive house.

Fluorescent ceiling trough provides general lighting in the living room of the same house shown above. Local lighting is provided by incandescent portable and fixed lights.

Photo by Ezra Stoller

Photo by Roger Sturtevant

Flexibility in lighting layout can be achieved at a price, even with built-in fixtures, as in this house by William Wilson Wurster, A.I.A. As part of the modular layout, recessed incandescent lights are placed in the ceiling throughout the house at regular intervals. Several switches control groups of lights. In addition to being costly, flush lights when used for general illumination produce contrasty light spots in the darker ceiling.

70% of its rated life, delivers from 70 to 84% of the light it did when it was brand new.

Portable Lamps

It is perfectly possible to design acceptable, inexpensive, portable fluorescent lamps. Ballasts, etc., need not be part of the lamp housing, as may be understood by examining some outdoor installations where the lamps can be up to 50 feet from the ballasts (these must be protected from weather). Thus a floor or table lamp can be designed with the ballast in the base, or a "pin-up" wall lamp, similar to those popularized for incandescent lamps, can be constructed with a ballast which fastens to the base board near the convenience outlet. We have already spoken of the Circline lamp, which is intended to make manufacture of conventional portable lamps easier.

How Does the Public Like Fluorescent?

A recent survey leads to some surprising conclusions. It was concerned primarily with those who have existing homes in which lighting is to be modernized. Many were outright in favor of fluorescent lighting; of these, approximately 30% wanted it in their kitchens first, about 25% in bathrooms, 15% in living rooms. Much more surprising, however, was the emphasis on built-in lighting. Well over half those who wanted fluorescent lighting, and almost the same proportion of those who wanted some new lighting but weren't sure what kind, wanted their lighting built-in. If such a preference is general, it makes for public acceptance of the gentle-flood-of-light idea. Even if those who indicated such a preference merely meant to imply that they wanted more of the fixtures which it is the current fashion to eliminate in favor of "base plugs," that it is a reversal of what we have considered an accepted trend. The survey also indicated, as might be expected, that fluorescent lighting is encountered most frequently in single-family homes, least in two- and three-family houses, with apartments in between.

Below, specially designed fluorescent fixtures for office lighting, in the United Carbon Building, Martens and Son, Architects. This is the fluorescent counterpart of the residential scheme shown above, but for a commercial structure. One manufacturer of suspended fluorescent fixtures has recently introduced a commercial-industrial fixture suspended by detachable chains with a plug-in cord for inserting into a standard convenience outlet placed in the ceiling. Such an approach to the problem might make possible true flexibility in residential lighting using ceiling fixtures, without undue expense.

Photo by Jean St. Thomas

Reviews

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Periodicals

Bibliographies

Books

DIES IRAE

The Condition of Man. *By Lewis Mumford. Harcourt Brace & Co., Inc., 383 Madison Ave., New York, 1944. 421 pp., XVI plates, bibliography, index. $5.00*

In *The Condition of Man,* Lewis Mumford has written a history of Western Man which is more important than any of his preceding books, since it proposes a program for the regeneration of our society. He skillfully analyzes the major ideas which have influenced the western world since the Age of Pericles. Christianity, Capitalism, Marxism are assessed. Their good and bad features are stressed. In the process, sparks fly, epigrams are flung out, and a good many shocks administered to tender sensibilities. In the end some vital principles of enduring value are emphasized, as, a good world is possible when the individuals who compose it are good. This is a point which can never be overstressed.

There is so much discernment and fresh original criticism in these pages that any summary is bound to be unsatisfactory, but a little sampling may suggest the flavor of the whole. Greek civilization is said to have failed because it was parochial and tolerated homosexuality, infanticide, and slavery, all of which limit the full growth of the individual. Roman civilization failed, according to Mumford, because it encouraged parasitism and diverted too much creative energy into recreation. The Medieval synthesis, according to Mumford's view, was the most organic society man has yet achieved. It gave each man fellowship and beauty in every aspect of his life, home, work, and recreation, but fell before the disintegrating effects of Capitalism, Absolutism, and Protestantism.

The Era of Expansion, which is what Mumford calls the period since the Middle Ages, is shown to be over; since expansion into new lands, the growth of population, and the potential of the machine have reached their limits. The fake gods of the Era of Expansion, such as "change" and "progress," have been shown up, but no better ones found. Hence the gross barbarism of our world, barbarism which Mumford shows is accelerating. He compares the world's righteous indignation over the treatment of Henri Pirenne in 1914 with the recent tolerance toward the atrocities

(Continued on page 106)

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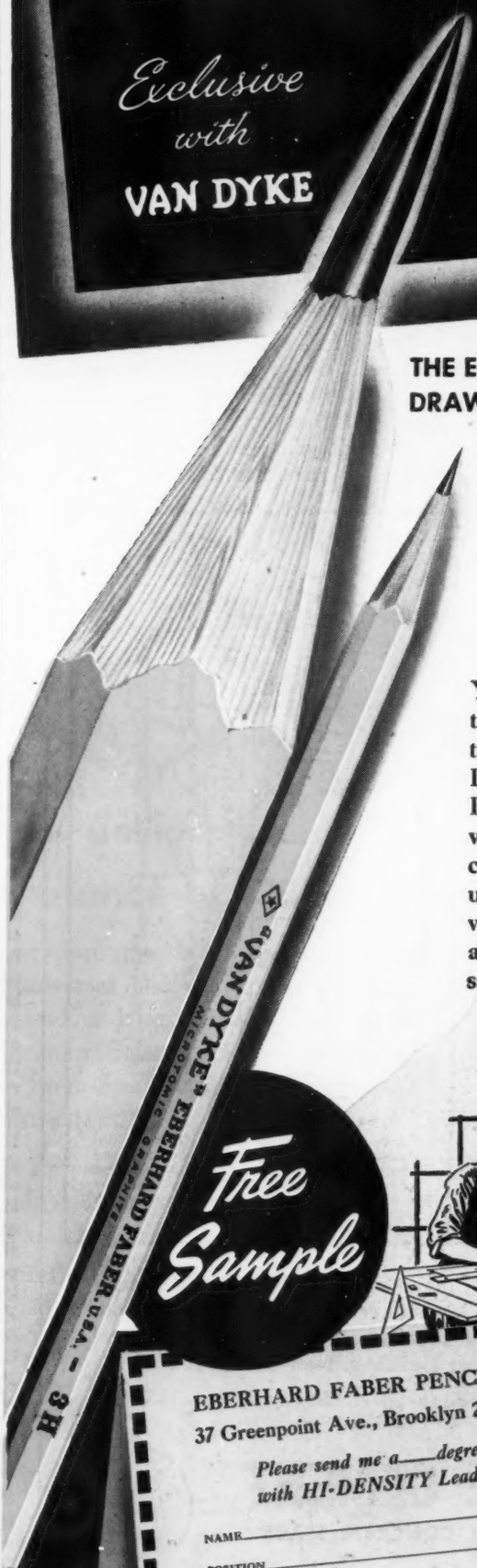

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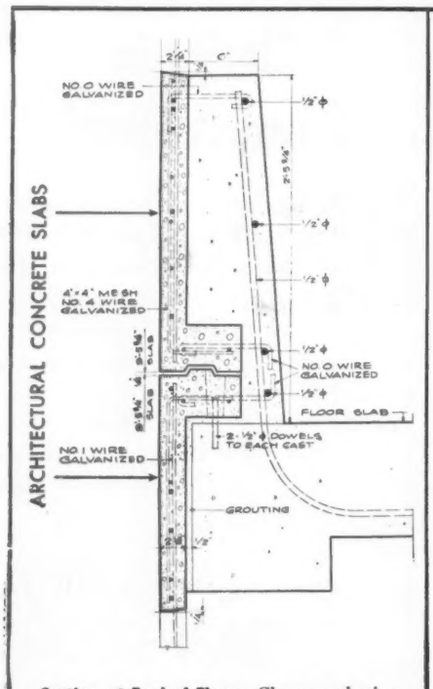
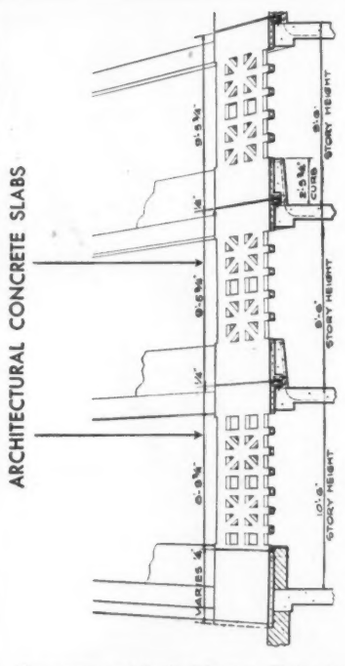


Section at Typical Floors. Shows anchoring (1) by means of lugs cast integrally with the pre-cast slabs and (2) by means of reinforcing rods extending from pre-cast slab to cast-in-place fender curb.



Perspective of Typical Section. Thin pierced Architectural Concrete Slabs eliminated need of heavy walls, reduced support needed for such walls, and eliminated need and cost of fenestration and of sprinkler system for open-air garage.

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Reviews

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committed by fascism and gangsterism. A new era began, Mumford says, during the last third of the 19th century. Our failure to realize that we are now in an Era of Stabilization, and our inability to change our ideas to meet these new conditions are why western civilization is in danger of collapsing into utter barbarism. The ugly utilitarian philosophy of the 19th century which in Marxism exalted the material basis of society at the expense of idealism, and which used the theory of natural selection to justify the brutality of industrialism, is still more pernicious now.

In addition to such themes there are equally cogent analyses of such "institutions" as Romanticism, Nationalism (the religion of the 19th century), and such topics as sexuality, the Country House (suburbia), The Picnic, and the Sanatoria. The latter two are cynically shown to be the current conceptions of bliss. In other words our utopias tend, Mumford says, to be selfish and shallow. In his search through history for something of lasting value Mumford has found gold in the work of such diverse men as Sir Thomas More, Rousseau, Calvin, Dante, Patrick Geddes, Fourier, Havelock Ellis, and Freud.

Mumford has attempted to write a psychoanalysis of Western Man. He has taken the clock apart and, in my opinion, has found out what makes it tick. In *The Condition of Man* he has also sounded the alarm which he has been preparing to ring ever since he wrote his first book, *The Story of Utopias*, in 1922. The main objective of all of Mumford's pungent social criticism has been to examine the purposes and ends of human development, with the object of defining worth-while goals. He calls his philosophy "Organic Humanism." By this he means the integration of well-rounded individuals with the social institutions that will nurture them.

It is only natural to compare Mumford's synthetic study of history with some other attempts at the same difficult task. Harry Elmer Barnes in *An Intellectual and Cultural History of the Western World* did not succeed in integrating politics, art, and economics, etc. He kept them in separate sections. Egon Friedell's *The Cultural History of the Modern Age*, published in 1927, is entertaining but superficial. The books of Bernard Shaw, H. G. Wells, Spengler, and Will Durant are either inconclusive or doctrinaire. It is my belief that Mumford has done a better job than any of the preceding group.

He has kept his goal steadily in view. He has been dispassionate. He does not put faith in any system. He stresses "orientation not organization." He goes

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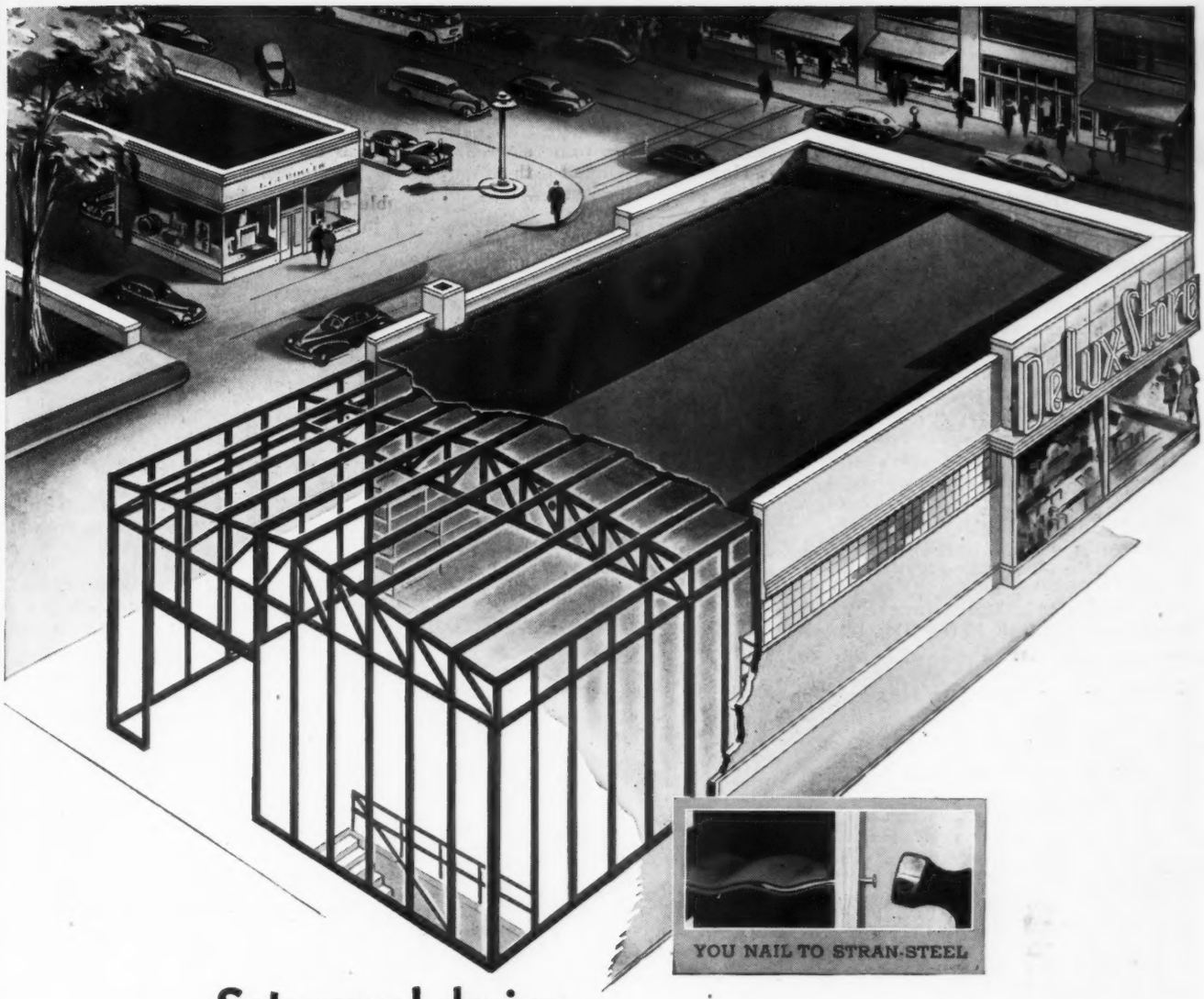

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Reviews

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deep in his search for fundamentals. In vigorous colorful language, he calls upon men of good will to examine their egos and super-egos, to establish qualitative standards, values which will serve to restore sanity and hope to a disintegrating world. Messianic? Perhaps. But Mumford's is a tolerant gospel. No art, science, or philosophy has been arbitrarily excluded from his researches. The reader is left with disgust for our current moral inertia and with hope for a more rational future in which each personality will have an opportunity for fulfillment. Man has, Mumford says, nearly achieved this goal twice, in the heyday of Greece when a man like Sophocles could be both a dramatist and a general, and again in the Middle Ages when a man like Thomas Aquinas could compose the *Summa Theologica*. Mumford has shown how this goal can be reached again in our time.

The plates form, as they did in *The Culture of Cities*, a variation on the main theme. They are groups of paintings accompanied by a column of comment. The paintings were selected to illustrate changing concepts of personality; austerity in Romanesque times, the human warmth of the Middle Ages, the discovery of the ordinary man in the Renaissance, and in our time the misery of industrial man. Van Gogh's "Cornfield with Blackbirds" is shown as a prophetic vision of the torment of our civilization, a mingling of foreboding and faith. The curious reader will also find the bibliography full of items which may have escaped his attention, and which will open up to him many fruitful lines of inquiry.

A word of warning; Mumford has written a book for adults. This is not a "popular" book. It will take a diligent reader at least 12 hours to read it through, and longer still to grasp its full import, but it is worth every minute one gives to it. There is no more pressing question today than the one Mumford is treating: a disintegrating society or a revitalized civilization?

He offers a helpful series of tests of the validity of policy: "Does it lead to the old goal of expansion or the new goal of equilibrium? Does it foster good men or merely goods? Does it make for a universal society or merely a selfish one?"

The question may be asked, why is this book being reviewed in an architectural magazine? What is its connection with architecture? Just as architecture has broadened its base to include planning, so Mumford has broadened his field of inquiry through his successive books, until now he has come face to face with the basic problems which underlie good architecture. Every architect who is concerned about the state of the world will find *The Condition of Man* helpful. The progressive architect knows that progressive architecture can only flourish in a stable world in which individuals are at liberty to develop character and conscience. Mumford has found and described a dynamic program for our time.

C. L. V. MEEKS

CHAOS IS A LEGACY

I Am Thinking of My Darling. AN ADVENTURE STORY. *By Vincent McHugh. Simon and Schuster, 1230 Sixth Avenue, New York, 1943. 292 pp. $2.50*

City planning is coming in better packages every day. A hilarious novel by a *New Yorker* staff writer is one of the new vehicles for some sermons on urbanism. Against the (fantastic) backdrop of a happiness-producing, inhibition-releasing, highly contagious epidemic which temporarily knocks out the country's largest city, a good deal of planning and architectural patois is tossed about.

The chief character in this adventure story is the city planning commissioner of New York, pro tem., whose escapades and accomplishments—when he gets an opportunity for some over-all planning—provide entertaining reading to startle the more serious of the planning brethren. He is sober enough for one moment to explain his department's activities: "It isn't just civil engineering or traffic control or zoning. It's architecture and meteorology and sanitation and biometrics and human geography and politics and divination by signs. Oh, and a little high finance. We make up the capital budget too. . . . . Ever hear of Patrick Geddes? Well, it's human ecology—trying to figure out the smoothest interaction between the way people act and the place they live in. That's the theory. Actually we spend most of our time settling rows over garage sites in Queens. . . . We've inherited three hundred years of the Goddamnedest confusion man ever made."

It seems that it is only in frothy stories that the planning boys ever get the go-ahead! With a major crisis befalling the city (and Federal troops threatening invasion) the Board of Estimate selects its *planner* to run the whole show because "his department can spare him. He's the only man that's got to know about the whole business. He's got to plan for it. Who makes up the capital budget? Who else has to know every dinky schoolhouse and bridge and pipeline in the whole setup? He makes the maps. He figures out how everything fits into everything else. . . He's the over-all guy." Ah, fiction!

McHugh claims city planning as one of his "special interests." He obviously knows "the names" in the field. He even manages to get in a few licks for Henry Wright, Harry Millis, John R. Commons, the Harvard School of Planning, and Daniel Burnham, among others. He finds space also to air his views on architecture in general and New York's in particular. On buildings, as on municipal government and politics, his approach is contemporary. Along with all this he can kid the planners and architects and their magazines aplenty, with some dead-pan routines on the city of the future.

The book is a jumble of facts and fancies, and wanders in fields far distant from planning and architecture. Never having seen a big handsome planning commissioner (with S. A. and a Harvard Ph.D. in sociology) whip into action with plenary authority (and probably never expecting to), we are struck by *I Am Thinking of My Darling* as great fun.

RITA DAVIDSON AND WILLIAM SMULL

EFFECT OF CITIES ON HUMANS

Cities of Latin America: HOUSING AND PLANNING TO THE SOUTH. *By Francis Violich. Reinhold Publishing Corporation, 330 West 42 Street, New York 18, N. Y., 1944. 241 pp., illustrated. $3.50*

Latin American cities have borne the burden of the medieval pattern for hundreds of years and are struggling to meet the demands hurled upon them by changing life. Most cities in the United States are laden with a mere hundred years' accumulation. Yet this analysis of planning and housing in ten Latin American countries offers a view of North American progress in the same fields which might not have been possible if attempted directly—for distance lends perspective.

"Planning" problems in the author's view are "those obstacles of a physical, social, economic, and political nature which stand in the way of providing a twentieth-century environment for the average man." The Latin American attempts to achieve such an environment offer fresh and informative material. At the same time, though Violich adds little (deliberately) to the factual knowledge about the United States, his analytical method provides a standard of comparison. Progress in Latin America can be measured not only against achievements in the United States but also against that theoretical cultural and technical *mean* defined by contemporary knowledge. Consequently we can judge this country as well as our neighbors to the south.

The author's recent extensive travels throughout Central and South America gave him direct contact with the problems about which he writes. Instead of becoming lost in a descriptive maze of the trunkloads of material he amassed, Violich approached his topics functionally and emerged with a coordinated approach. If he seems to hammer home some lessons, it is because he knows too well that a veil of misunderstanding and ignorance has separated the two continents. He rarely generalizes for his chief point is that we must recognize that the territory discussed is vast and diverse. Realization of the extreme differences of climate, topography, lan-

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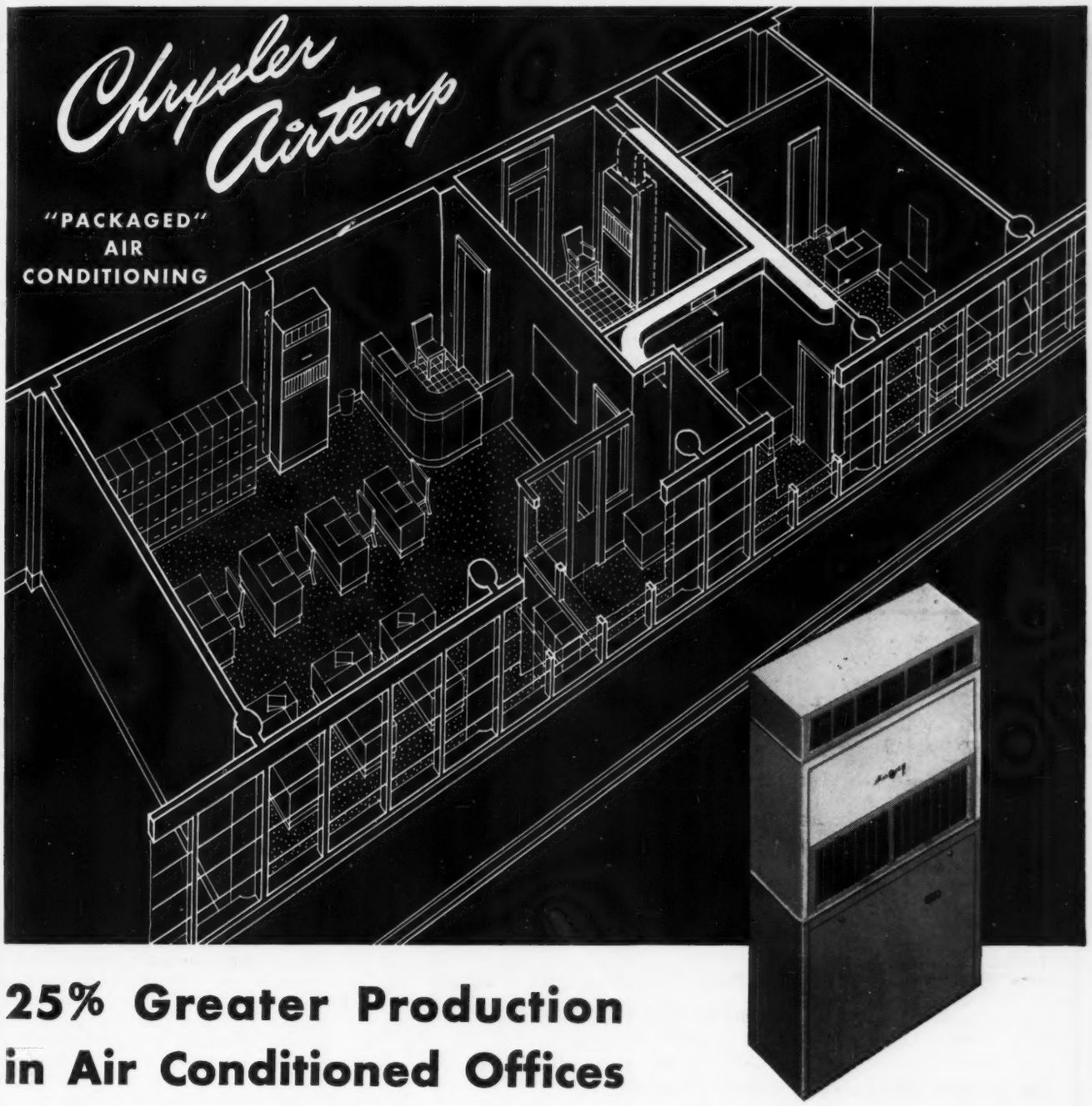

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Reviews

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guage, culture, and history is imperative, if one is to understand Latin America and Violich.

Behind his engaging and almost breezy style, the author is acutely aware of the fundamental problems faced by the South American technicians. He realizes that if only one-third of the peoples to the south of us are adequately housed, the causes are deep in the economic and political system. Fundamentally, there can be little progress until there has been a material increase in the wage level (in a real as well as a financial sense) and in the literacy of the population. At the same time, because of the chaotic situation regarding the natural resources, it is imperative that a policy for planned resource development be followed. This calls for a comprehensive transportation system and development of power.

A lack of statistical information (of the type so well provided by our various census reports) has proved a check to the Latin American planners and architects. Their attainments have been remarkable, particularly when examined in the light of their handicaps. They have in many instances achieved "the human scale in planning" which we now consider so important. Their progress is the more amazing when compared directly with the slight gains American cities have made despite superior financial resources and greater public enlightenment. They have developed also some economic techniques whose adaptability might be investigated more fully by American officials. The survey adds so much new material for planners, housers, and architects that complete coverage here would lead only to a cataloguing of references. A few techniques of particular importance should not pass unmentioned. Urban redevelopers will be interested particularly in the use of *plus valia*, an assessment device which resembles excess condemnation. In Mexico City, when redevelopment of a blighted area is contemplated, neighborhood committees are appointed. These are composed of the property owners affected. Under the general direction of the Planning Commission, these provide for the financing and construction of the project. A tax is assessed based on the estimated higher value of the property (due to the public improvements, which may sometimes so increase that more funds are collected than are actually needed). The system has proved effective in inspiring the full cooperation of the property owners concerned and in making public improvements actually pay for themselves in the end.

Another device which might be studied further is the use of social security funds for investment in low-income and possibly other types of housing. At a time when the United States social security system has been attacked because its funds have not been completely *frozen*, the more realistic Latin American approach is challenging.

Aside from readability, ample collection of photographs, and assortment of interesting facts, the book is appealing because it lays stress on the persons actually engaged in planning and designing. The chapter on "Technicians, Students, and Citizens," the appendix of Latin American planning technicians, and Violich's recitation of his personal contacts with many of these individuals, are all useful. He furnishes strong propaganda for a stronger bond among architects and planners in the United States, and for increasing versatility on the part of each. At the same time he lays a groundwork for interchange of men and ideas, so essential to the two Americas.

Violich may seem unduly enthusiastic to some and not quite scholarly. Admittedly it seems to be the merit of his study that it is neither "popular" nor overly pedantic. This is a book of considerable value to anyone interested in "the effect of cities on the lives of human beings and . . . new forces that are pointing the way toward social advance in urban environment."

RITA DAVIDSON AND WILLIAM SMULL

(REVIEWS *continued on page 112*)

3¾"
4½"
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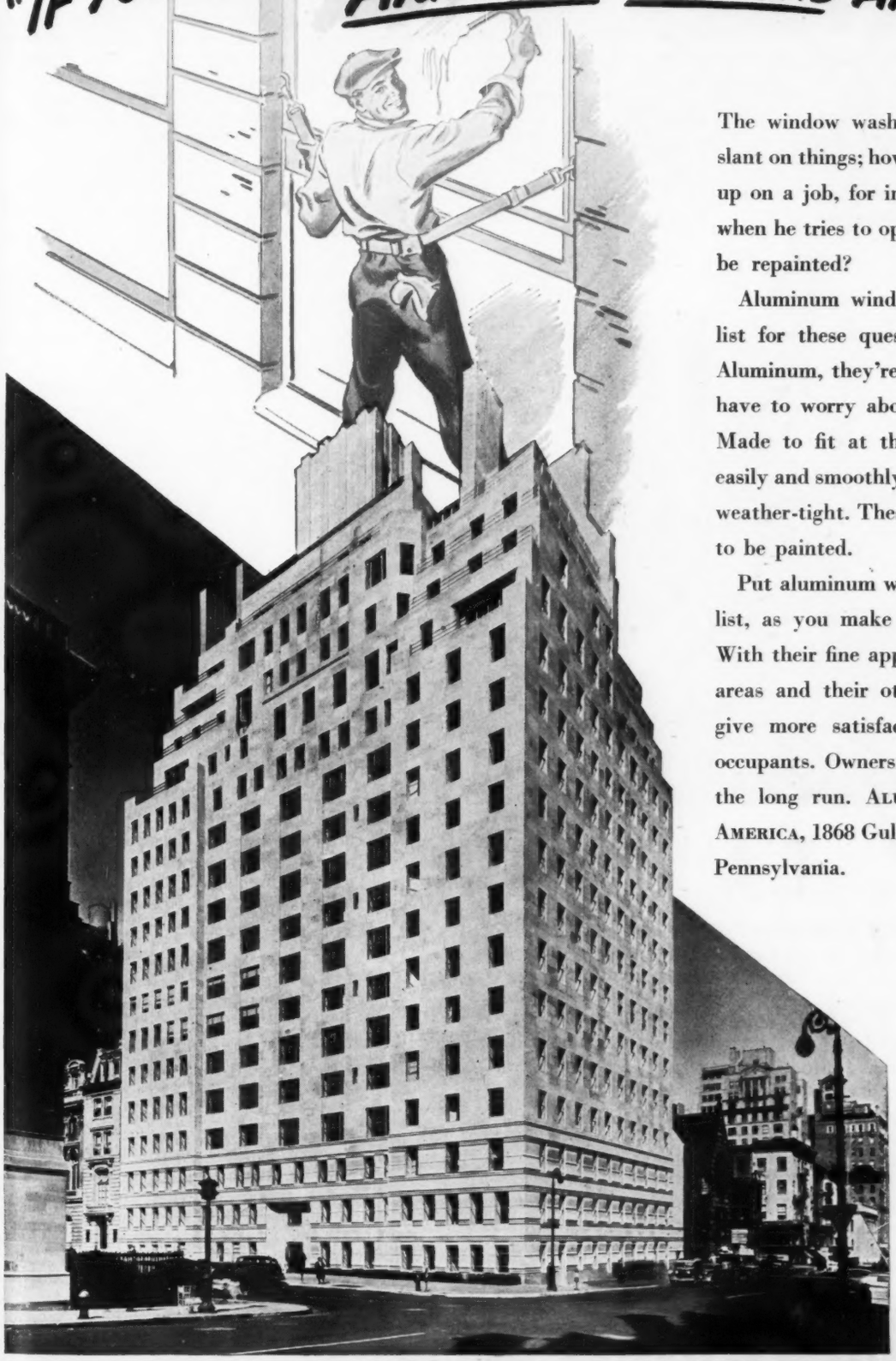

The window washer gets an interesting slant on things; how windows are standing up on a job, for instance. Do they stick when he tries to open them? Should they be repainted?

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Apartment House at 19 East 72nd Street, New York City

Architects: Rosario Candela and Mott B. Schmidt

ALCOA FIRST IN ALUMINUM

Reviews

(Continued from page 110)

Planning Pamphlets

Reviewed by Margaret Greenough King

EYES TO THE FUTURE

Quality Control in City Building. THE CULTURAL FUNCTION OF ENVIRONMENTAL PLANNING. *By Hugo Leipziger, Member of Post-War Construction Committee, A.I.A. Reprinted from Journal of Architecture, Engineering and Industry, Vol. 6, January 1944. College of Engineering, University of Texas.*

Pointing out that most postwar plans of the Robert Moses type stress action to two ends—to provide postwar employment and to "modernize" our cities—Leipziger pertinently wonders if this hit-or-miss method can possibly produce a city which will incorporate "the vision of democratic principles in the form of a characteristic environmental pattern."

One of his strongest statements on the use of a truly contemporary approach to architecture is: "While the masquerade of eclecticism has enjoyed a comparatively harmless existence since the 18th century, it was left to the modern dictator countries to misuse it successfully as a powerful political weapon in the way of environmental psychology. By this conscious manipulation they became guilty of the same fraud which is represented by their perversion of science in general."

There is so much of value here that it is impossible to record it all, but this is recommended as a scholarly, balanced survey of planning by one who cherishes ideals of democracy. Meantime, many so-called planners are busy grinding their own axes, to obvious material ends, while failing to realize that short-sighted planning means eventual ruin.

Post-War Economic Policy and Planning. REPORT OF THE HON. JOSEPH C. O'MAHONEY, U. S. SENATOR FROM WYOMING, TO THE SPECIAL COMMITTEE ON POST-WAR ECONOMIC POLICY AND PLANNING. PURSUANT TO S. RES. 102, A RESOLUTION INCORPORATING THIS COMMITTEE. *78th Congress, Document No. 106, U. S. Government Printing Office, Washington, D. C. October 1944.*

In essence, this report indicates that in general the right of an individual to establish and run his own business is doomed to failure—and that government control must be continued in the transition period. This would "tend to accustom the people to management by the government, in other words, to totalitarian government," as we are living in an age of organizational rather than individual activity.

Some of the plans of the government and of labor agencies for the reconversion period are summarized; and an index of postwar abstracts from here and abroad is included. The public debt and other items of political importance come into this discussion.

Your Detroit, A Finer City in Which to Live and Work. *Post-War Public Improvements Prepared by Mayor's Post-War Improvement Committee, 1944.*

Leveled at the head of the average citizen, this report describes to him the public works for which he will pay and why they are necessary.

Maps showing the growth of the city since 1920 and creditable sketches of the proposed public improvements—with a map showing the location of these projects—are included. A civic center, express highways, an airport, buildings for Wayne University ("destined to become one of the nation's great educational centers"), schools, recreational centers, public housing, sewer systems, fire and police stations, are shown. All except the high school, intermediate school, and fire station are more or less contemporary in design.

Housing Costs—Where the Housing Dollar Goes. National Housing Bulletin No. 2. *Office of the Administration,*

(Continued on page 114)

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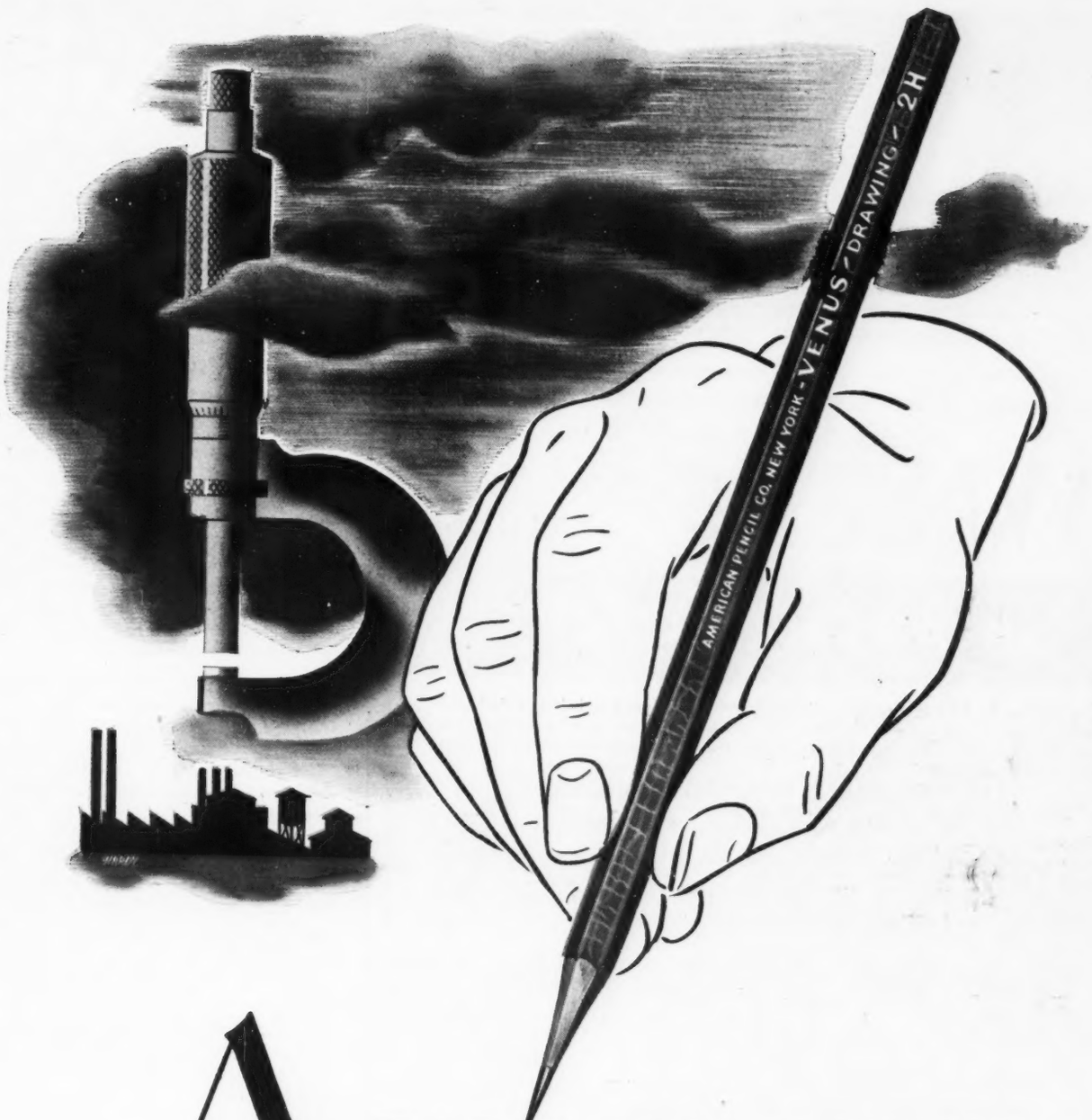

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Reviews

(Continued from page 112)

National Housing Agency, Washington, D. C. October 1944.

This important aspect of planning is thoroughly covered. "Housing Costs and Family Incomes"; "Have Housing Costs Been Reduced"; "Approaches to Cost Reduction, Depreciation and Maintenance"; and "Restrictive Practices," are most important chapters.

A table of wage rates (1944) per hour for building trades in the principal cities is included.

Abstracts of Selected Material on Post-War Housing and Urban Development, Group VIII. *National Housing Agency, Office of the Administrator, Urban Development Division, Washington, D. C. November 1944.*

Selected material on planning from this country and abroad is briefed in these sheets published irregularly during the year. No critical comment is included.

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Housing for the United States After the War. Publication No. N 193. *National Association of Housing Officials, 1313 East 60 Street, Chicago 37, Ill. May 1944. 50¢ per copy*

In this booklet the Association has outlined the major factors influencing postwar housing. It is felt that private enterprise must take the lead in housing, but that in the lowest cost housing bracket a system to facilitate cooperation between housing authorities and private enterprise must be worked out.

"The Kind of Housing We Need" (standards, types, design, and planning) is an excellent statement of the aims and the many facets of planning.

Monthly Report of the Executive Secretary To Commissioners, Vol. IV. No. VII. *Chicago Housing Authority, 343 South Dearborn Street, Chicago, Ill. November 15, 1944.*

War housing and low rent housing, critically needed in the Chicago area, were being pushed at the date of this report, with three uncompleted projects under way. There is a general review of conditions in the slum areas, of the programs and characteristics of improvement projects.

Education in housing needs is planned for professional and administrative employees of the Chicago Housing Authority. A rehabilitation survey of Chicago's south side is being made to determine sociological and structural conditions.

Program's Progress. SECOND SUPPLEMENT TO THE FIRST REPORT. *Housing Authority of the City of Vallejo, California. January 1 to June 30, 1944.*

This publication marks the completion of two years of war housing in Vallejo and gives a good picture of one of the most successful wartime projects.

In it are to be found discussions of leasing, occupancy, and management, as well as general accounts of the activities involved in running the various housing groups within the community.

Periodicals

Reviewed by Margaret Greenough King

THE ARCHITECT'S JOURNAL. London, England.
October 19, 1944

Hugh S. Philips, in his article "Planning Public Places," points out that what is needed in most communities is not a monstrous "city hall," but a real center offering amenities of every kind to the citizens. These would include workshops, public halls for meetings, recreation facilities of all kinds, and would make a true civic center.

The eighteenth wartime list of prices for building materials is published this week.

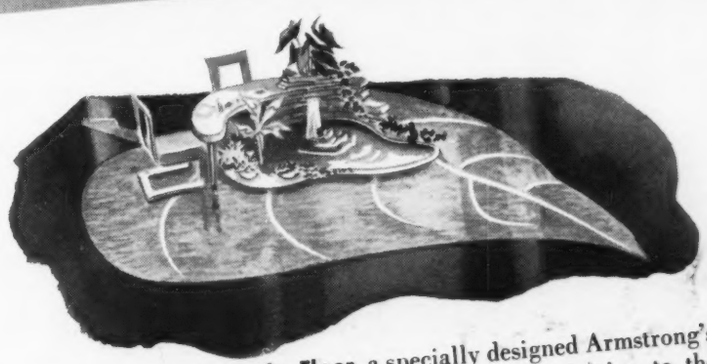
The Birmingham Experimental Houses, designed by engineer Herbert J. Manzoni, as shown here are truly homely, and are typical of the two-story tradi-

(Continued on page 116)

for the ARCHITECT

. . . who is planning retail stores

. . . CENTER UNIT FOR A FLORIST SHOP



An Eye-Catching Fountain in the center of the shop gives a friendly greeting to patrons and creates a distinctive atmosphere. The fountain also humidifies the air and affords a striking display for flowers and plants. Its convenient built-in card desk adds additional smartness to the modern appearance of the store's interior.

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These and many other modernization ideas, created in collaboration with the Florists' Telegraph Delivery Association Inc., are presented in our new portfolio entitled, "Ideas for Florists." It was designed primarily to interest florists in remodeling and contains a full color reproduction of a model florist shop along with other helpful data. (Similar portfolios are available on request for the following retail fields: grocery stores, beauty shops, drug stores, and restaurants.) We offer them to you as a help in planning retailers' needs. Write Armstrong Cork Company, Floor Division, 2301 State Street, Lancaster, Penna.

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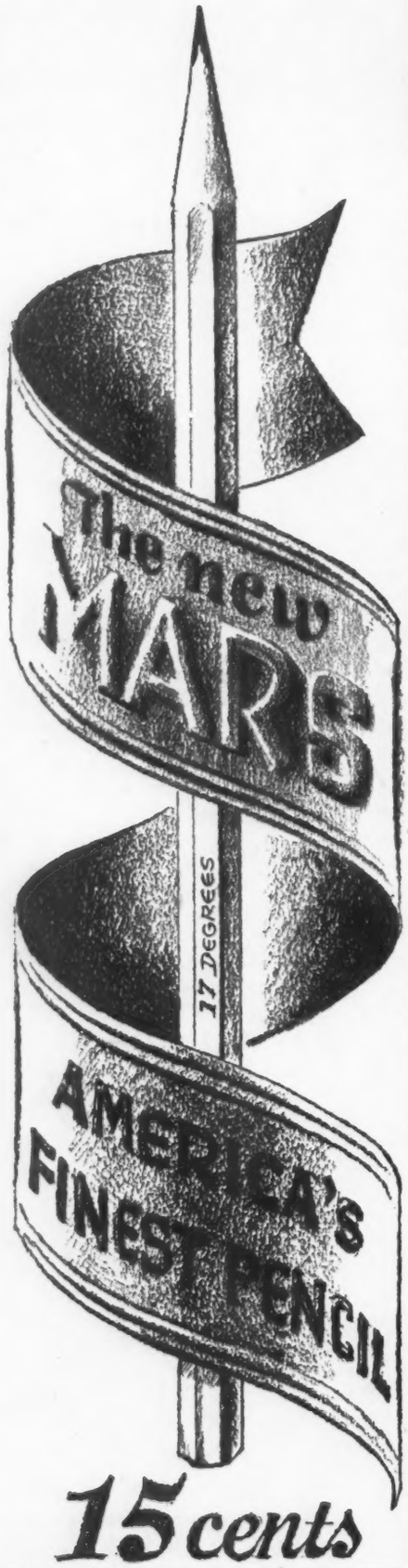

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Reviews

(Continued from page 114)

tional brick house which, in spite of its ugliness, is in favor with so many real estate developers here and, it seems, in Britain.

October 26, 1944

The editorial "Converting Old Homes" is excellent, pointing out that the most numerous old homes are the Victorian houses geared to an entirely different type of living than that of today or the postwar future. Though these are "still structurally sound, they are socially obsolete." Because of bomb destruction in England, it will be necessary to convert many such houses for temporary living. A plea is made for intelligent conversion by competent architects, rather than the usual carpenter changes which occur so often in remodeling—and achieve so little. Some reconverted houses at Hempstead are published.

There are extracts from three of the nine lectures given at the Town and Country Planning Summer School. Subjects include "Industry and Its Environment," "Social Aspects of Town Planning," "Planning by Lease Control."

ARCHITECTURAL DESIGN AND CONSTRUCTION. London, England.
October 1944

There have been several experiments in emergency houses in England, most of which have come in for some acid criticism. The best of these is the latest Lord Portal house by a firm of architects known as "Arcon." Emergency shelter has assumed greater importance of late because of the destruction from flying bombs.

An article on "The Schools We Should Build" by C. G. Stillman, illustrated by photographs and details of several American schools, is concerned in particular with the school as the center of community life.

"Clay Products and the New Building," by Tom Wathey, is an excellent article from the British point of view, on the necessity for more careful standardization of clay products. England's timber scarcity, due to extend long after the war, forces her to consider these products, along with steel, as the most practicable building materials.

The M.O.W. Demonstration Houses at Northolt are well shown in the Housing Forum section—and once again it is obvious that the steel companies' houses are far superior to the traditional ones in design and construction. The former are light and airy and have real character; the latter are dull in the extreme, small-windowed, and as traditional as the ugliest house on any street.

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